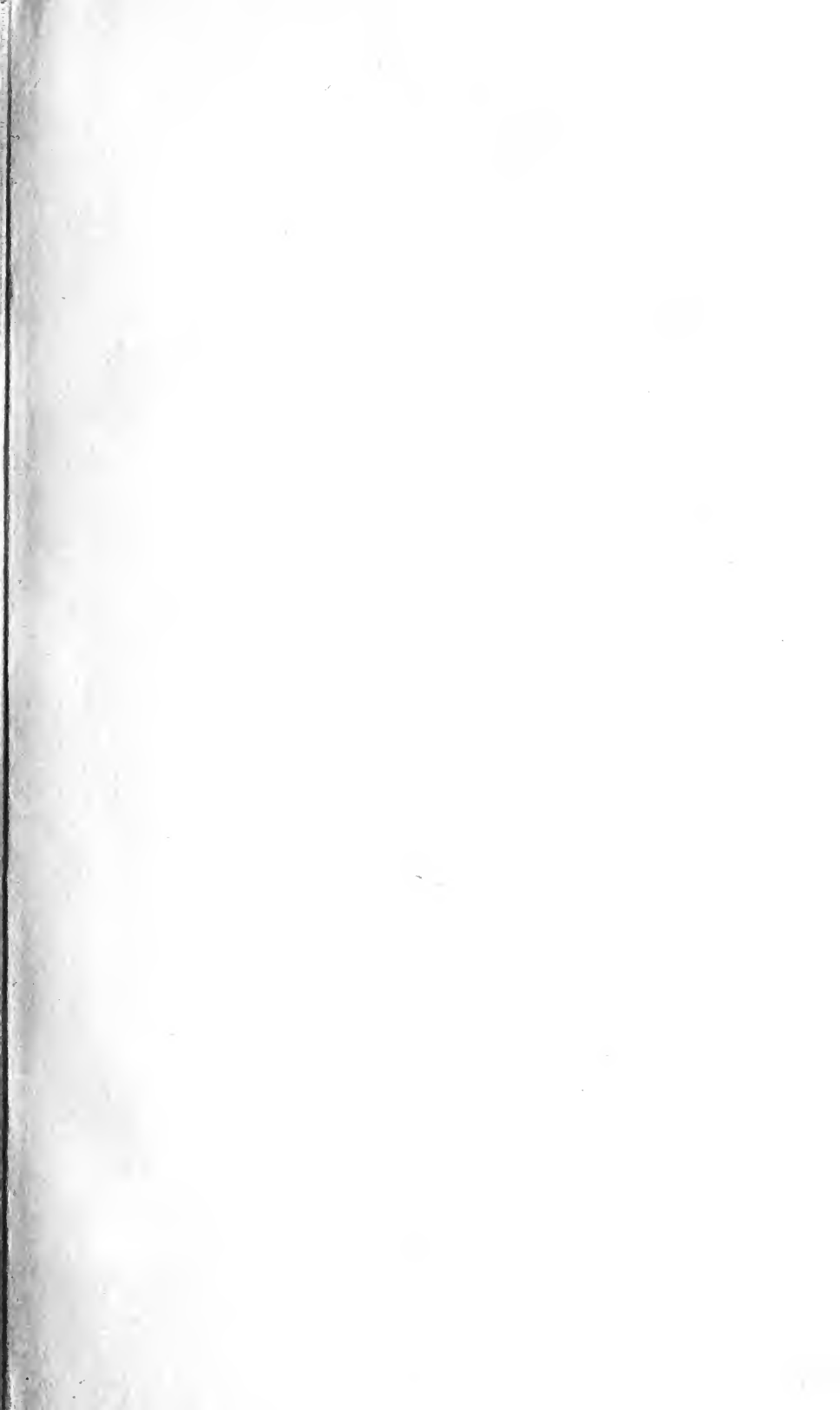
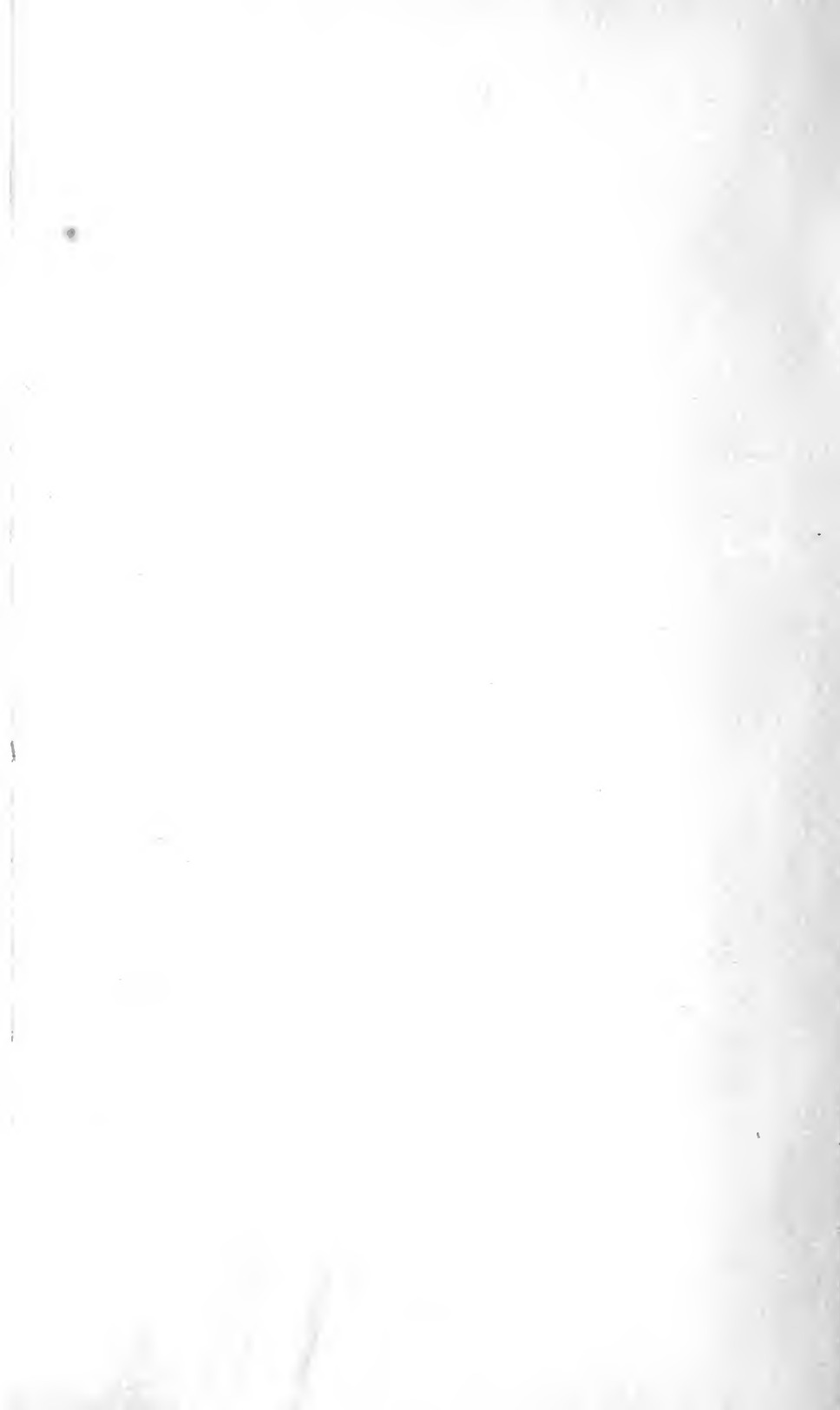


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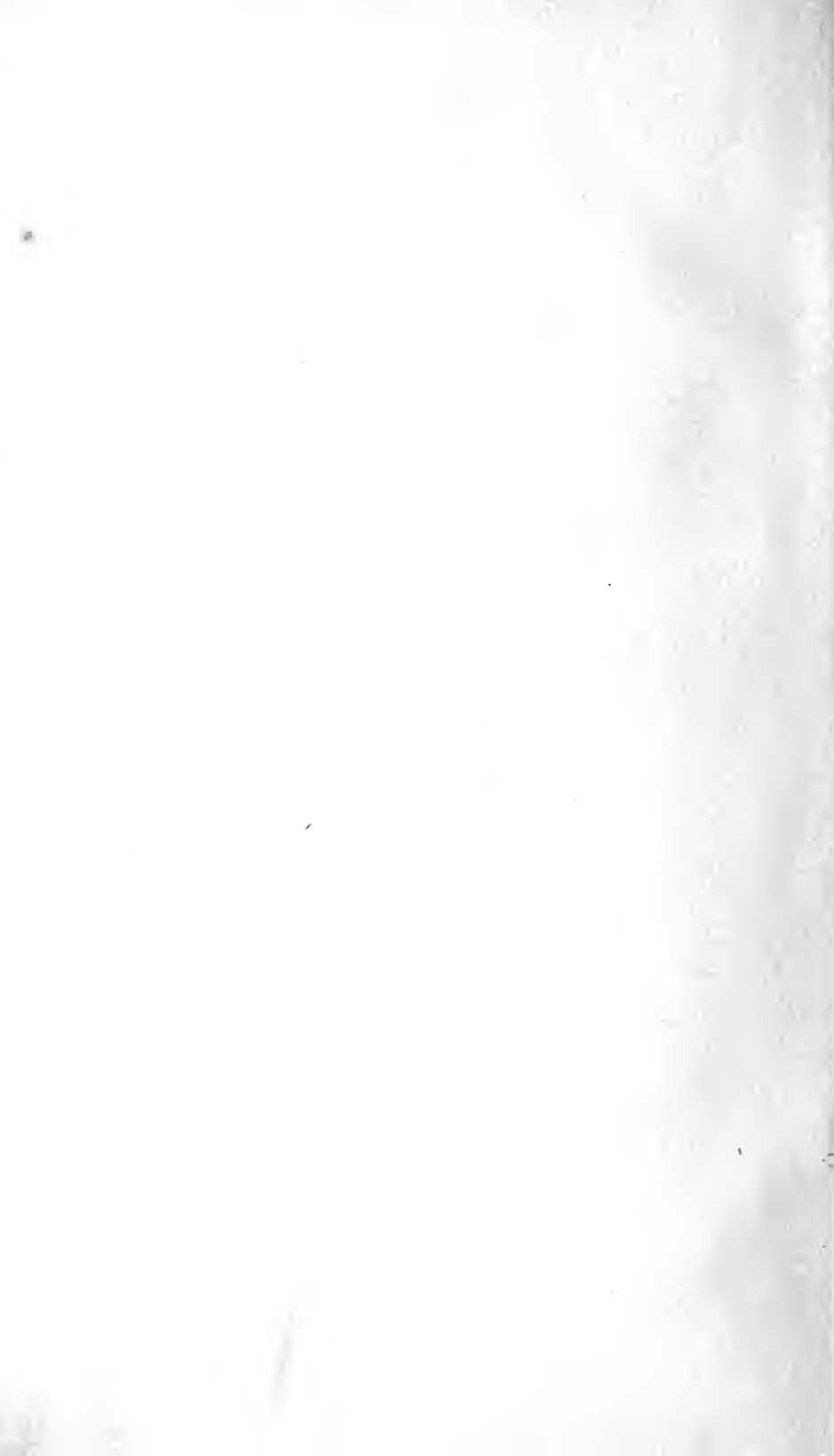


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I

THE
LONDON
MEDICAL AND SURGICAL
JOURNAL;

EXHIBITING
A VIEW OF THE IMPROVEMENTS AND DISCOVERIES
IN THE
VARIOUS BRANCHES OF MEDICAL SCIENCE.

EDITED BY
MICHAEL RYAN, M.D.
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS IN LONDON, &c. &c.
AND
AN ASSOCIATION OF PHYSICIANS AND SURGEONS.

" QUERERE VERUM."—HORACE.

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1835.



LECTURES

INTRODUCTORY TO THE COURSE OF THE
INSTITUTES OF MEDICINE,

DELIVERED BY

ROBERT J. GRAVES, M.D.,

King's Professor, Dublin.

LECTURE VIII.

GENTLEMEN,—At our last meeting we discussed the nature of that innate tendency displayed by mankind to become affected by a common impulse, a tendency which we called the instinct of imitation, and which has often given rise to events the most important.

At the commencement of the Christian era a monomania of migration appears to have seized the nomade tribes residing in the north-eastern parts of Europe and the west of Asia, and gave rise to those successive inundations of warlike hordes, which, for the time, nearly extinguished civilisation in the countries they invaded, but proved finally the means of giving birth to those principles of civil and religious freedom that now prevail in European society. No nation has suffered more from the sudden working of this passion than the Jews, whose history in Germany, France, Spain, and England exhibits so many intervals of repose, interrupted by violent persecutions carried on by the frantic populace with all the symptoms of temporary insanity. When accident, or the wickedness of some malicious person, had succeeded in producing a persecution of the Jews in any one city, the effect of this example was often sufficient to arouse the dormant passions of the rest of Christendom, and the persecution speedily became general. Shortly after the successful voyages of Columbus, in search of the New World, all the maritime nations of Europe were seized with a mania of discovery, and the dreams of society were every where gilded with the wealth of unknown regions, with the treasures of Eldorado. This passion ruined thousands it is true, but the enthusiasm it generated enabled man to overcome difficulties to all appearance

insurmountable, and, in a comparatively short space of time, he was rewarded with a knowledge of geography, the enlightened parent of commerce. I need not remind you, gentlemen, of those periods of history when the votaries of astrology and alchemy successively forged chains, in which society was led away captive, neither is it necessary to advert to the lasting effects produced by the passing mania of knight-errantry; all these subjects have been treated of fully by authors of ability.

As communication improves by means of steam-vessels, rail-roads, and other contrivances, the brilliant results of the mechanical genius of the age, society will be placed in a situation still more liable to the influence of this instinct, a circumstance imperatively demanding the consideration of those whose duty it is to frame laws for the government of mankind. Formerly the inhabitants of any particular shire, or district, were almost insulated, and held little intercourse with the rest of their countrymen, and consequently very different feelings, customs, and opinions prevailed in the different parts of the same nation, and served together, with difference of dialect and accent, to prevent the origin of a common sympathy. Trifling as the circumstance may appear, there can be little doubt that the difference of costume, which was then observable in each county, served to render the line of demarcation still stronger. Society, thus subdivided into a great number of distinct parts, was not, except on extraordinary occasions, liable to be affected by one common impulse. This state of things no longer exists; the tendency of modern improvement has been to remove the impediments which separated one part of the population from another, its effects have fused all into one common mass; nations are now more closely connected, and maintain a more frequent, rapid, and perfect intercourse with each other than formerly existed between different subdivisions of the same kingdom. In consequence of this change, as yet by no means fully accomplished, man is fast approaching to a state, in which the heaving of the public mind, no longer confined by the limits of a district, or the boundaries of a nation, will spread with rapidity from people to people,

acquiring in its course force, magnitude, and buoyancy, and rolling onward an ocean wave from hemisphere to hemisphere. Raised by the storm of social agitation in the New World, already has it traversed the deep, and precipitated itself on France, has prostrated the most venerable institutions, the most stable monuments of the old; already, reflected back across the Atlantic, has it broken on the shores of South America, shaking, as it fell, the very foundations of that mighty Continent.

The workings of the instinct of imitation are extremely varied, and comprise all those different impressions which suddenly, and unaided by the exercise of the judgment, infect any numerous body of individuals. The panics that have so often arisen in the best disciplined armies must be thus accounted for. The well known "*saute qui peut*," which hastened the final catastrophe of the hard fought field of Waterloo, is not without a parallel in the annals of the British army. Napier, in his admirable history of the War in the Peninsula*, records a remarkable instance of a panic in that division of our army which, above all others, was distinguished for valour and discipline:—

"On the 22nd Sept. 1810, General Pack destroyed the bridges over the Criz, and fell back upon the light division, but on the 23rd the enemy re-established the communication, passed the river, and obliged the British horse to quit the plain and take to the hills behind Montago. Three squadrons of light and one of heavy cavalry were retained there by Lord Wellington, but the rest he sent over the Sierra de Busaco to the low country, about Milhadra, whence he recalled Spencer, and, at the same time, caused the third and fourth divisions to take their ground on the position of the former, at St. Antonio de Cantara, the latter at the convent; the light division, falling back only a league, then encamped in a wood, where happened one of those extraordinary panics that in ancient times were attributed to the influence of a hostile god. No enemy was near, no alarm was given, yet suddenly the troops, as if seized with a frenzy, were startled from sleep and dispersed in every direction, nor was there any possibility of allaying this strange terror until some persons called out that the enemy's cavalry were amongst them, when the soldiers mechanically ran together in masses, and the illusion was instantly dissipated."

The following, related by Southey, in his Peninsular War †, strikingly illustrates the effects produced on animals by an union of acquired discipline and the instinct of imitation. It occurred on the embarkation of the Spaniards under the Marquis de la Romana:—

"Two of the regiments were cavalry, mounted on fine, black, long-tailed Andalusian

horses; these, about one thousand one hundred in number, it was impracticable to bring off, and Romana was not a man who could order them to be destroyed lest they should fall into the hands of the French. He was fond of horses himself, and knew that every man was attached to the beast which had carried him so far and so faithfully. Their bridles, therefore, were taken off, and they were turned loose upon the beach. As they moved off they passed some of the country horses and mares, which were feeding at a little distance. A scene ensued such as probably was never before witnessed. The Spanish horses are not mutilated, and they were sensible that they were no longer under any restraint of human power; a general conflict ensued, in which, retaining the discipline they had learnt, they charged each other in squadrons of ten or twenty together; then closely engaged, striking with their fore feet, and biting and tearing each other with the most ferocious rage, and trampling over those which were beaten down, the shore, in the course of a quarter of an hour, was strewn with the dead and disabled. Part of them had been set free on a rising ground at some distance, but they no sooner heard the roar of battle, than they came thundering down over the intermediate hedges, and, catching the contagious madness, plunged into the fight with equal fury. Sublime as the scene was, it was too horrible to be long contemplated, and Romana, in mercy, gave orders for destroying them."

I shall now pass to another part of my subject, the varieties of the human race. This matter has been so fully discussed by Lawrence and Prichard (whose works I would strongly recommend you to peruse), that very little remains for me to remark.

In the human species we observe very remarkable varieties as to conformation of body, peculiarities of size and form, and particularly with respect to the colour of the hair, eyes, and skin. There is a vast difference in point of colour and appearance between the negro tribes and the inhabitants of England, Germany, and Denmark. You will find that most authors have agreed in dividing the human species into certain races according to some shades of colour which preponderate. Thus we have the fair, comprising the Europeans and Circassian variety; the black, which includes all the negro and negrite tribes; and the copper colour, which prevails in North and South America, a part of Africa, and a portion of China; and, lastly, we have the olive tribes of Asia, including China and the northern parts of Hindostan.

I shall not enter into any detailed descriptions of these tribes; I used formerly to lecture on these subjects more fully, but find I cannot at present spare time for that purpose, and beg leave to refer you to the works already alluded to. I shall merely mention one fact, also dwelt upon by Dr. Prichard, namely, that none of these tribes constitute a distinct spe-

* Vol. III. c. vii. p. 327.

† Vol. II. p. 345.

cies; it is much better to call them varieties. We find that all have been for a very great length of time distinct from each other; thus black and red skins have existed from the earliest historical eras. This is proved by the paintings which exist on the walls of the Egyptian temples, in which we observe these two colours carefully distinguished. If we can place credit in the Chinese records, the olive race must also be of great antiquity; and the same must be allowed of the Jews, Greeks, and Persians of the white race.

Some physiologists have contended that where you find any particular race flourishing it is quite in vain to endeavour to plant another there very different in character from the native of the country. Thus, if a country be filled with black aborigines, it is quite useless to attempt to colonise it with whites, and they point to Sierra Leone as an example corroborating their views. They assert that if you take a country inhabited by any intermediate race between the white and black, as, for instance, the red or the olive, you may, with some hopes of success, plant either of the extremes in that country, and they refer to the facility with which both whites and blacks become naturalised to the climate of America. This conclusion has a great appearance of plausibility, but it is not borne out by the fact. At very remote historical eras, various red and black tribes existed in Africa, and they still subsist there, while an addition has been made since the Hegira by the introduction of the white Arabian race; thus at present we have three distinct shades of colour coexisting in Africa. Two of them have been living together from the most remote antiquity, and the white has been settled among them for the last 1100 years.

It is not merely by colour that the different varieties of mankind are distinguished from each other. Most of you are aware that the negro differs from the European not only in the colour of his hair and skin, but also in his skeleton, in the form of his skull, in his spine, his ribs, and his superior and inferior extremities. There can be no doubt that the European has a more highly developed organisation, so far as the skull is concerned, and that its form possesses great advantages over that of the negro. This distinction is quite obvious on a slight inspection of the skulls of each, and you can tell at a glance, by its low and retreating forehead, that this belonged to a negro.

Inasmuch, therefore, as the cranial organs of the white or European race are found to be more fully developed than those of other nations, many authors have been led to the opinion that they possess an intellectual superiority over the rest of their species, and that the history of mankind furnishes ample proof of this assertion. We have already seen what imperfect instruments, and how little calculated to promote the spread of knowledge, many of the languages spoken by the black,

red, and-olive races are, and I think it may be fairly questioned, whether this and other accidents of a similar tendency have not contributed to retard the intellectual progress of such nations whose deficiencies we are wont to attribute, not partly to co-operating causes, but entirely to a supposed want of development in the cerebral mass. History informs us that science first dawned upon Egypt, that it was there the first seeds of civilisation were planted, and that it was from Egypt that the science and literature and arts of antiquity were transplanted into Western Asia and Europe. And, what is still more remarkable, there are strong and almost certain proofs that the Egyptians received their learning and their civilisation from the black or Ethiopian race; indeed Mr. Prichard seems to have established this fact beyond contradiction. Here then is a fact contrary to the general opinion, that the European variety has always surpassed the other races in the career of literature and science. The cradle of European literature lay in Greece, which, it has been fully proved, derived the greater part of its learning from Egypt, and this in its turn from the black tribes inhabiting Ethiopia. It should also be remembered, that literature and science in China were for many centuries in a far more advanced state than they were at the same periods among the European nations.

I may observe, that with respect to the black and white varieties of mankind, the habits which distinguish them are, like their colour, hereditary. Thus it might be supposed that the children of European parents, born in a warm climate, from being habituated to it from the moment of birth, would be far better able to bear it than their parents. Such, however, is not the fact. The children of English, French, and Irish parents bear a warm climate very badly; they languish during infancy, and frequently die before they attain the age of puberty, so that, in order to secure a certain degree of power in the constitution, it is frequently necessary to send them back to Europe. On the other hand, children born in the Indies, and of a stock intermediate between the Hindoo and the European, participate in the qualities of both, being in body as active and healthy as the Hindoo, and in intellect as distinguished as the European. There is no way in which the crossing of breeds has been so successful in producing a vigorous and intellectual race as between the European and the Indian.

It appears that many habits, physical as well as moral, are to a very remarkable extent hereditary; of this I could bring forth numerous instances. The hereditary tendency to certain moral or immoral habits in particular persons has been long known; and it has been frequently remarked that the offspring of such individuals share in the same tendencies, and are exposed to the same dangers in passing through life. The same hereditary resemblance exists also with respect to certain habits of

body. Thus, if the parents are accustomed to the use of a certain species of aliment, the same will be found to agree with their offspring. Our infants would soon sicken and die, if obliged to take the food on which the infants of the Greenlander and Esquimaux subsist and thrive. I was intimate with the late Sir Charles Giesecké, Professor of Mineralogy to the Dublin Society, who had spent some time in Greenland, and he told me that he has often seen sucking infants, five or six months old, lying at the bottom of a boat, while the parents were engaged in fishing, seize on a piece of blubber or stinking fish, and suck and swallow it with avidity, nor has he ever known any bad consequences to ensue from the use of such apparently improper aliment. I need not say that a very small portion of such substances would act as a kind of poison on one of our Irish children, whose parents feed on milk and potatoes. This is an interesting subject for consideration, and is worthy of being borne in mind by the practical physician.

The form of the head differs very considerably among the various races of mankind, but in none is it so remarkable for its peculiarities as among the Carribean tribes who inhabit the West Indian Archipelago and a portion of Continental America. Here, however, the very striking diversity of shape is owing, not to any peculiar natural conformation, but to the operation of artificial means, sedulously employed from the earliest periods of infantile life. You are aware that compression, if applied constantly during the period of growth, will prevent any part of the body from becoming fully developed. Hence, the Chinese, who confine the feet of their female children in iron boots during the period of growth, succeed in producing those wonderfully small and distorted feet on which their fine ladies hobble. A somewhat similar mode, and for the same fashionable purposes, has been adopted with respect to the head by the Caribs. If compression was carefully and constantly applied to the head on all sides, the growth of the cranium and brain would be obstructed, and the individuals experimented on might have amazingly small heads, as the Chinese have small feet; but even if it were possible for such persons to arrive at full growth and maturity, the necessary consequence of such compression would be to make them idiots. However, it is possible to modify the shape of the head very considerably without inflicting any great or abiding injury on the mental faculties, by applying compression in a particular way, so as to make the skull assume a different shape from the natural one, without lessening its volume or that of its contents. Some of the Indians, hence called *Flatheads*, compress the skull laterally, and by this means the head is made to assume a flattened and elongated shape, so that a line passing from beneath the chin to the vertex, instead of being seven or eight

inches, is nearly twice that length. I need scarcely add, that the origin of this disfigurement is to be traced to that all-pervading principle—vanity, a flat and elongated head being looked upon by the Indians as an unequivocal mark of nobility and beauty. Other tribes compress the head backwards and downwards, so as to make it project posteriorly in a very curious manner. Which of these modes is the most physiological I cannot venture to pronounce, but they certainly succeed in altering the shape of the skull and brain to a very considerable extent, and, what is equally curious, this unnatural treatment does not appear to interfere much with the development of their intellectual faculties. It would appear that, though the natural shape of the brain is changed to a very considerable extent, still this organ retains its usual size and weight. I mention these facts, because, at a late meeting of the British Association at Edinburgh, there was a debate as to whether some skulls dug up in Mexico did or did not belong to an extinct race, because they happened to be shaped in a curious manner, similar to that now spoken of.

I have already alluded to the fact, that the different races of mankind are adapted to different countries and climates, and that each lives longest in the country where it is either aboriginal or settled for a long course of generations. This law, however, does not seem to affect that race intermediate between the natives of two very different climates, as we see exemplified in the vigorous and long-lived breed which results from a cross between whites and negroes. It is a common saying, and an article of popular belief, that we in the north of Europe are healthier, stronger, and live to a more advanced age than the dusky inhabitants of the tropics. I do not think either of these assertions borne out by the truth. I believe that many of the black tribes of Africa are as robust and as powerful men as either the Swede, the German, or the Englishman. The descriptions given by Clapperton and Denham of the blacks inhabiting the interior of Africa are quite sufficient to prove that they are possessed of great bodily strength and uncommon vigour of constitution. Major Denham mentions that on one occasion, having to cross over a slippery and dangerous chasm, he was under the necessity of having himself carried by one of the natives; and he says that, while mounted on the brawny shoulders of this gigantic negro, he could not help feeling his own deficient strength, as compared with that of his guide, who carried him with as much apparent ease as a woman carries an infant. With respect to longevity, we do not find that in this respect either do the whites possess any advantages over their dusky fellow-men. You are aware that in North America the two races have subsisted together for a considerable length of time, and that, although some late acts of the government

have removed many of the disabilities under which the black population laboured, still their intermixture with the whites is by no means extensive. However they sometimes do, and their children are much in the habit of intermarrying. Now it is a curious fact that this mixed breed, forming the different varieties of mulattoes, are not only an intellectual race, but they are also remarkable for their bodily vigour, and, in particular, for their superior longevity. According to a late census of the population of the United States, it appears that of 20,000 whites only one arrives at the age of 100, of the blacks only one out of 1400; while among the mulattoes, one out of every 500 attains the age of an hundred. This seems very strange, particularly to those who suppose that no constitution can equal that of the European or white in vigour and durability; however, there can be no mistake in the matter, for the facts I have mentioned, are taken from an official census. Here, then, we have evidence sufficient to overturn the erroneous notions which prevailed with respect to the comparative longevity of the black and white races; for we find that in America, a climate which would appear equally suited to all, the black is longer lived than the white, and the mulatto than either. One would be led to imagine that the mixture of black and white would give rise to a mongrel breed, possessing neither durability nor strength of constitution; but this is not the case, for we find that forty times as many mulattoes become centenarians as we can meet with in the same number of whites.

With respect to the structure and development of the body of the new-born infant, I shall say but very little at present. I have already alluded to the development of the brain in infants, and dwelt on its peculiar adaptation, at that period, to the purposes of knowledge. Nature has been at particular pains in preparing the brain, so as to facilitate the progress of intellect as much as possible, and hence we find the child gifted with very remarkable powers of perception, memory, and imagination. Along with the brain and nerves we have the digestive system also in a state of very high development, it being necessary that the digestive functions should be performed with great activity, in order to supply a sufficiency of materials for the increase and growth of the body. With this view, also, there exists at this period a considerable degree of energy in the respiratory and circulating systems, but, after these, the remaining portions of the system seem to possess but little power, and are destined to remain in the back ground for some time. Thus we find the organs of locomotion and voice more or less imperfect. The bones are soft and flexible, and have not sufficient firmness for supporting the weight of the body; the muscles are weak and delicate, and, as yet, unaccustomed to obey the will; the limbs are short and small, and the larynx incapable of those motions which are necessary for the formation of articulate

sounds. The adaptation of all these arrangements to the peculiar circumstances of the infant, is sufficiently obvious, and requires no comment. It should be observed with respect to the body of the infant as compared with that of the adult, that not only are the bones softer, but also the brain, blood-vessels, and cellular membrane, in fact, the whole flesh is softer, and, to put the matter in a stronger point of view, the specific weight of the infant is smaller than that of the adult, and of the adult than the aged. Again, the bodies of infants are composed of materials less highly animalised than those of adults at the mature period.

You will recollect, then, that in the firmness and specific gravity of its textures the infant falls short of the adult, and the adult of the aged. As old age creeps on, there is a tendency in the fluids to diminish in quantity, and the solids to become firmer and denser in their structure, and as this progresses from day to day, and from year to year, the inevitable consequence is, that our organs become less and less adapted to the performance of their functions, and life ceases.

The weight of a male infant at birth is, on an average, about seven English pounds. On this point I need not take up your attention, for you will find the matter treated in detail in your works on midwifery and medical jurisprudence. You will find some very interesting observations on this point, which were made by a Flemish investigator, Dr. Quetelet, and which have been translated in Jameson's Journal. There is one curious circumstance connected with the weight of children at birth, which was first noticed by Chaussier, and has been since confirmed by the researches of Quetelet, viz. that the weight of a child diminishes for some days after birth (slightly however), and that it does not begin to exceed the weight at birth until after the first week. Girls, as you are all aware are lighter than boys at the period of birth, and they continue so until they approach the age of puberty, when they begin to gain on boys in point of weight, so that at twelve a girl becomes as heavy as a boy of the same age. The cause of this rapid increase in growth is the earlier puberty of the female sex. The adult continues to increase in breadth long after he ceases to grow in height: his flesh, also, becomes more solid, and he generally arrives at his maximum weight at forty. After sixty he begins to decline and lose sensibly in his weight; and if he should survive to eighty, he will have lost about one-ninth of his maximum weight, and, along with this, he will be found to have reduced (according to the French measurement) about seven centimetres of his height. Hence there appears to be some truth in Nestor's remark, that he was neither so bulky nor so tall as in the days of his youth. In women, the period of arriving at the maximum of weight is different. They continue, generally speaking, stationary as to weight

from the age of nineteen until the period of bearing children is passed, when they begin to increase rapidly in weight, and ordinarily attain their maximum at fifty. On an average, it appears from some calculations which have been made, that at the heaviest the adult weighs something about twenty times as much as at birth. With regard to the weight of children at different periods, it would appear that it is influenced very considerably by the greater activity of the digestive powers in the earlier stages of infancy, for, one year after birth, the infant will generally be found to have tripled its weight. At seven, they only weigh double what they did at one, and they do not quadruple the weight of one until they arrive at fourteen.

This rapid increase of growth under the operation of highly energetic nutritive powers, furnishes a very striking proof of the great activity of the digestive organs, and we know that in proportion to the activity of an organ is its liability to disease. This shows that most of the diseases of children will be of a gastro-intestinal character, and that our principal remedies will be aperients, emetics, and medicines calculated to relieve intestinal irritation. In fact, every organ in the child (particularly those most important to life) is in a state of high vascularity; and this predominance of fluids circulating in vessels having all the characters of energetic vitality, is necessarily accompanied by a tendency to inflammation, and hence the rapidity with which inflammatory affections attack the organs of children. As the impetus of the circulation is also directed with great force towards the periphery, we can easily explain why the skin of the child is more vascular than that of the adult, and why cutaneous diseases should be more numerous, more extensive, and more rapid, in the child than in the adult. To illustrate this, I need only give a single example. In the adult, itch sometimes appears and puts on either a vesicular, or papular, or pustular appearance (I disagree with M. Biet, who asserts that it is always vesicular); but, unless the individual be a person of filthy habits and totally neglects it, its progress is but slow and its extent inconsiderable; in fact, it is almost exclusively confined to the spaces between the fingers, and the insides of the joints. The face and scalp almost always escape. But in the infant its course is very different; it spreads with great rapidity, not sparing either the face or scalp, and in the course of a few days the body is covered by a cutaneous eruption. The skin cracks and oozes a serous fluid, and this, combined with the intolerable itching, renders it a very annoying or even dangerous complaint. All these differences are accounted for by the physiological differences of the skin, which, as you are aware, is characterised by high vascularity and irritability during the period of infantile life.

With respect to the circulation and respiration of the child, it may be remarked, that

they are carried on with great energy; the heart and lungs are small, but they make up for this by an increased activity. The pulse is quick, and the action of the lung is intense in proportion to its size; and hence Laennec, in distinguishing that state of respiration in the adult where the function is carried on with unusual energy, has termed it *puerile respiration*. The investigations of modern physiologists, which have naturally followed the important discoveries of Laennec, have elicited some curious facts respecting the circulation in the earlier periods of life; and have shown, that before birth the pulse is uncommonly quick, amounting to 160 in a minute. It has been lately ascertained, at Berlin, that the approach of a labour pain may be foretold by a person who keeps the stethoscope applied to the abdomen of a parturient woman by means of a marked acceleration of the heart's action for several seconds before the pain commences. This shows a remarkable connexion between the vital actions of the fœtus and those of the mother, and is well worthy of observation.

It is not my intention, gentlemen, to speak of the motions of the fœtus in utero. The impulse of different portions of its body against the uterine parietes is felt plainly by the mother, and can be even distinguished by the eye*. That they result from any exercise of volition on the part of the fœtus appears extremely improbable; some circumstances have led me to think that they are of an involuntary and spasmodic nature, similar to the irregular muscular motions that take place in every one when falling asleep. As the fœtus, when born at seven months, or even earlier, is capable of awaking, it is obvious, that for the last two months of its sojourn in utero, the state of its nervous system must be something similar to what it is after birth at the usual period of nine months. Whether it truly sleeps, or whether it awakes at times, will never be ascertained.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XVI.

Retroversion of the Uterus—Extra-Uterine Pregnancy.

GENTLEMEN,—At my last lecture I concluded my observations on the signs of pregnancy.

* These are not to be confounded with the motions produced by sudden changes of shape in the uterus itself, and which take place equally in the pseudo-pregnancy occasioned by hydatis and other causes.

You would, perhaps, at the first thought, expect that I should now proceed to describe that process which terminates pregnancy, viz. labour, but before I do this, there is a variety of deviations and derangements, to which pregnancy is liable, which it will be necessary for me to consider before describing labour itself.

During the earlier months of pregnancy the uterus is liable, although rarely, to a very peculiar displacement, called *retroversion*, where the fundus is forced downwards and backwards between the sacrum and posterior part of the vagina, while its cervix and mouth are carried forwards and upwards towards the symphysis pubis.

This is a disease which, in many instances, depends upon the connexion of the uterus with the bladder, which is so intimate by means of the peritoneum and cellular substance, that whenever the bladder rises by distension, the uterus must rise also. Now, as the bladder is globular, and the point of adhesion, between the two organs, is only at the inferior part, it follows that the uterus must go off at a tangent from the globe of the bladder, its fundus being thrown further back, at the same time that its orifice is carried higher up. This happens in every case of retention of urine. It is evident, that if, during this position, pressure be made from above on the fundus uteri by the intestines, or if the fundus contain any thing which makes it heavy, it must be pushed lower down, by which the uterus will come either to lie horizontally across the pelvis, or may be turned completely upside down. This does not often happen to the unimpregnated uterus, because in that state there is seldom any sufficient gravitating cause applied to the fundus, but in gestation there is a period in which the fundus becomes sufficiently heavy from the ovum, which it contains, and yet is not so much distended as to prevent its being turned down into the pelvis; this period is about the third or fourth month, often before it but never after it.

Besides this cause, which produces a sudden and immediate retroversion of the uterus, this disease may likewise be produced by the uterus remaining too long in that situation, which is natural to it when impregnated, viz. with its fundus inclined backwards; this may depend on various causes, such as too great width of the pelvis, or the pressure of the ilium full of fæces on the fore part of the uterus. In this case the weight of the fundus must gradually produce a retroversion, and we shall be sensible of its progress from day to day, whereas the other takes place suddenly. In this disease, by introducing the finger into the vagina, we ascertain that the os uteri is raised much higher and thrown more forward than usual, so that sometimes it cannot even be reached; by the same means, or by the finger in ano, we discover a hard tumour, formed by the fundus uteri, pretty low down, between the vagina and rectum. - These are the distinguish-

ing marks of the disease, and we are led to suspect its presence by the following symptoms:—there is a sense of fulness and weight at the fundament, tension in the groins, and inability to void either urine or fæces, owing to the pressure on the neck of the bladder and rectum*. When such suppressions once begin they aggravate the evil, not merely by causing pain, but by occasioning a load of accumulated urine and fæces above the uterus, which presses it still lower into the cavity of the pelvis, at the same time, as I before mentioned, the distension of the bladder in this state draws up that part of the vagina and cervix uteri, with which it was connected, so as to throw the fundus uteri still more directly downwards†. These conditions of the bladder and rectum, and the retroversion of the uterus, act reciprocally as cause and effect, for the continuance of the distension of the bladder, and the descent of the fæces from the part of the intestine above the obstruction, must elevate still more the os uteri, and depress to a still greater degree the fundus; the retroversion, on the other hand, increases the affection of the bladder and rectum, from which the principal danger of the disease arises.

In this plate of Dr. Hunter's work (*showing it*) you have a very instructive view of the relative position of the parts in retroversion. In the first figure you see the enormously distended bladder, reaching nearly up to the scrobiculus cordis, and concealing every thing behind it; on cutting this open, as in the 2nd figure, the posterior wall of its cervix is pushed forwards, evidently from some projecting body behind, this, on incision, shows to be the os uteri tilted up against the neck of the bladder, and pressing so forcibly against it as to prevent the urine from escaping. In the posterior view you see the large globular mass of the fundus turned completely into the hollow of the sacrum, and compressing the rectum so as to flatten it and render it quite impervious. I know of no other plate extant which gives so clear and excellent a representation of this displacement.

This disease may be mistaken for a prolapsus uteri, but can be most easily distinguished from it. Firstly, by the vagina in retroversion interposing between the finger and the tumour, and the neck of the uterus being mounted up behind the symphysis pubis.

2dly. By the absence of the neck of the uterus, which is always felt in advance of the body, and fundus in prolapsus.

3dly. The symptoms never being so extreme in prolapsus, and are generally, if not always, relieved by assuming the upright posture.

4thly. By the prolapsed uterus always being moveable, the other obstinately fixed.

According to Mr. Burns, it may also be confounded with a diseased ovarium, when it may chance to occupy this place, or with an

* Burns.

† W. Hunter.

extra-uterine conception, when it may have been found between the rectum and vagina. "We believe (says Dr. Dewees) it may serve to distinguish between these two complaints, by noticing that in both the diseased ovarium and extra-uterine conception, the neck of the uterus is always within reach of the finger; we may also observe that both ovarian tumours and extra-uterine conception, are of slow and regular progress, especially, perhaps, the latter."

The cure consists in emptying the intestine by clysters, and removing the distension of the bladder by the catheter, whilst we attempt to push up the fundus with the finger; but our great object is first to procure the evacuation of the urine, after which the rest is more easily accomplished. The catheter should be employed *pro re natâ*, and the bowels emptied daily, either by medicine of a mild kind, or by injections. If this plan should not succeed in restoring the fundus, we should then maturely consider the propriety of mechanically replacing it. To aid us in our judgment we should consider, 1st, the period of gestation; 2ndly, the degree of development the uterus has undergone; 3rdly, the nature and severity of existing symptoms. The period of gestation should almost always influence our conduct in this complaint, and we may lay it down as a general rule the nearer that period approaches four months, the greater will be the necessity of acting promptly in procuring the reduction of the fundus. The reason for this is obvious; every day after this will but increase the difficulty of the reduction from the continually augmenting size of the ovum.

The degree of development should also be taken into consideration, as some uteri are as much expended at three months as others are at four. Consequently, when this is the case, there is a decided reason for acting earlier than may at other times be necessary. So also at the fourth month, if the development be less than is usual for that period, we may, *cæteris paribus*, delay the attempt at reposition, if any reason present itself to make this eligible. The extent or severity of the symptoms must ever be kept in view, as, for instance, where the suppression of the urine is complete, and not to be relieved by the catheter, in consequence of the extreme difficulty or impossibility to pass this instrument; here we must not temporise too long, lest the bladder become inflamed, gangrenous, or burst; for the bladder, from its very organisation, cannot bear distension beyond a certain degree, or beyond a certain time, without suffering serious mischief*. "There are few facts (says Dr. Dewees) of which we are more certain, than that a certain degree of distension of the bladder may exist for a considerable time, and even where we have been under the necessity of using the catheter, without producing retroversion, and we are also certain in retroversion that the

mere removal of the urine will but rarely, nay not once, perhaps, in ten times, where the complaint is of long standing, or the pregnancy be advanced beyond the third month, be sufficient to ensure the spontaneous or artificial reposition of the uterus."

In passing the catheter under these circumstances, as also whenever there is any peculiar difficulty, it is better to use the elastic catheter in preference to the silver one, as being not only the easiest to introduce, but also safer. And now that I am upon the subject, gentlemen, I will digress for a moment, and give you a few simple rules for using this instrument. Nothing is more simple than passing the female catheter, on account of the shortness of the urethra, and yet, to the beginner, nothing is more perplexing and difficult; and this is the more annoying to him, because he knows that it is an operation which he will be frequently called upon to perform in private practice, and where it must be done entirely by the guidance of his finger, unaided by the eye. The rules which are commonly given to find the orificium urethræ are, to my mind, very unpractical, and I do not hesitate to confess to you that I found them of no use in removing the difficulty when I first tried to pass the female catheter. I remember feeling much annoyed at not being able always to succeed in finding the orificium urethræ, and mentioned the grievance to my friend the late Dr. Gooch, who gave me the following directions, which I found of great service, and give them you nearly verbatim.—First pass your finger a little way into the vagina, you then know the relative situation of the parts; under the pubal arch you will feel the firm cord-like mass of the urethra, and, sliding your finger along it towards its anterior extremity, you cannot fail to find the orifice. The catheter should not be carried further into the bladder when the urine begins to flow, unless it ceases before the distension is removed, which, in some cases, happens in such a manner as to give us the idea of a bladder divided into two cavities. External pressure upon the abdomen will favour the discharge of the urine, after which the patient is sensible of such relief as to conclude that she is wholly freed from her disease*. In urgent cases, where the above mode of treatment has not succeeded in restoring the uterus to its natural position, Dr. W. Hunter asks if "it would not be advisable, in such a case, to perforate the uterus with a small trocar, or any other proper instrument, in order to discharge the liq. amnii, and thereby to render the uterus so small and lax as to admit of reduction." This practice has been attempted in a few instances; and an interesting case is recorded by Mr. Baynham, where the retroverted uterus was successfully punctured. The real nature of the disease had not been ascertained for six weeks, the catheter only being used night and morning.

* Dewees.

* Denman.

Even when the bladder was empty the fundus resisted every attempt to return it. The most prominent part of the tumour in the rectum was punctured by a trocar, and about $\frac{3}{4}$ xij. of liq. amni, without blood, were drawn off; the reduction followed in a quarter of an hour; a full opiate was given, and the patient passed a better night than she had done before. Twenty-five hours after the operation the fœtus was expelled, fresh, and of the size of a six months' child. The patient recovered.

One of the greatest difficulties with which we have to contend, are the violent and involuntary efforts to bear down, to which the woman is excited by the presence of the hand in the vagina, and we may thus be foiled in our attempt at reduction, although we have succeeded in evacuating the bladder and the rectum. To overcome this opposition, experience (says Dr. Dewees) has repeatedly taught us the efficacy of bleeding to or near to fainting. "When we have determined upon the bleeding, we should be prepared beforehand to take advantage of the deliquium, as its effects are but transitory. The bed should be prepared in such a manner as will allow the patient to lie upon her back with the perineum free over the edge of the bedstead, and her shoulders a little depressed. The parts should be well lubricated with lard or oil; a chair should be placed for each foot to rest on, and these supported by two bystanders; when every thing is in readiness, the arm should be tied up (the patient standing near the bed), a large orifice should be made, and the blood drawn until the faintness is induced; when this happens the arm must be secured, and the woman placed as just directed. The hand, well lubricated, should be passed into the vagina in a state of supination, and the fingers gently pressed against the base, as it were, of the tumour that is found within the vagina, so as to move it backwards and upwards along the hollow of the sacrum, until the mass shall reach above the projection of this bone; when thus far the hand may be withdrawn, and a pessary introduced of a proper size; the woman should remain quietly in bed for three or four days, the urine should be drawn off as often as may be required, and the fœces evacuated by injection.

Where the uterus has become retroverted, and has not produced much inconvenience, and has been allowed to continue for some considerable time, it becomes at last impossible to reduce the uterus on account of the large size of the fœtus. In some of these cases pregnancy has gone on nearly to its full period, violent pains have come on, and the child has been discharged into the vagina through an ulceration in the side of the uterus.

As these cases were for some time mistaken for extra-uterine conception, I shall delay any further observations on them until I come to speak of that subject.

The uterus is subject to another, though much rarer displacement (at least in the gravid state), called *anteversion*, where the fundus falls forwards against the posterior wall of the bladder, the os uteri being turned backwards into the hollow of the sacrum. A partial state of anteversion is not a very rare affection in the unimpregnated state, and appears (at least in the cases which I have seen) to be connected with some menstrual or gastric derangement. The chief symptom which leads us to suspect its presence, is inability to hold her water for any length of time, accompanied with much straining and forcing about the region of the bladder, and chiefly alleviated by the supine posture. I have never seen anteversion of the *gravid* womb but in one instance, and in describing the history of this case, I think I shall thus put the diagnosis of anteversion in the clearest point of view before you.

Mrs. F——, æt. 26, married four months, reckons that she is six weeks with child, no catamenia having appeared since then. Was seized ten days ago with great pain about the bladder, attended with constant inclination to make water, and straining as if she wanted to pass more; this pain returned yesterday with much severity, and a smart discharge of blood, accompanied with some coagula made its appearance; the pain has come on in fits, and there has been much sickness of stomach and some vomiting, with considerable oppression at the præcordia. Bowels costive, pulse slow and soft, countenance anxious and pale, is sleepy just now from the effects of an opiate glyster. Says that she has been frequently liable to a difficulty in retaining her water for any length of time, which has come on occasionally for some years before her marriage.

On examination per vaginam, I felt a hard body above the upper wall of the vagina, nearly in the situation of the neck of the bladder when much distended, the superior portion of the vagina was stretched, evidently by being pulled backwards. I could distinctly feel where it became united with the cervix uteri, but there was none of that cul de sac which one usually feels on examining the upper part of this canal, at the spot where its mucous membrane is reflected upon the cervix uteri; on the contrary, it formed a straight surface running backwards. On passing my finger backwards, I found the os uteri in the hollow of the sacrum so completely directed backwards, that I could only reach its anterior lip; being therefore convinced that it was the fundus which I had felt anteriorly, I pressed it upwards pretty firmly; the os uteri now came within reach, it was open enough to admit my finger with ease, and, using my finger as a blunt hook, I gently pulled it forwards; the uterus distinctly swung round, the tumour at the back of the neck of the bladder disappeared, and the os uteri returned to its natural situation. My examination produced a slight discharge of blood, but she had lost the painful.

want to empty the bladder, nor did she feel now the dragging in the neighbourhood of the broad ligaments from which she had before suffered. ℥ x. of liq. opii. sed. and ℥ xx. of spiritus ammon. aromat. were given in a draught, and she was directed to lie upon her back and keep her knees up. I saw her the next day; she had passed a comfortable night; the fundus and os uteri, &c., were in their natural situation; there was scarcely any discharge, the pulse stronger, and she was in good spirits. There was considerable doubt entertained by my friend, Mr. M. Wagstaffe and myself, whether abortion had taken place or not, several coagula were discharged, but we could find no traces of an ovum. I saw the patient no more, and have since lost sight of her; but, at the time when I drew up this case, from the size of the fundus and general condition of the os uteri, I felt convinced that she was not only pregnant, but that in all probability the ovum had not been expelled.

I now come, gentlemen, to the subject of *extra-uterine pregnancy*. The ovum does not always, when impregnated, quit the ovary and pass through the Fallopian tube into the uterus. It may remain in the ovary and become here developed, it may pass into the Fallopian tube and there remain, or, from some defect in the action of the fimbriated extremity of this canal, it may escape into the cavity of the abdomen, and become there attached to some viscus; hence, extra-uterine pregnancy has been divided into three species, viz.—*graviditas ovaria, tubaria, and ventralis*. Besides these, M. Breschet has observed another species of extra-uterine pregnancy, which he calls *graviditas in substantiâ uteri*.

This singular deviation from the usual course of conception is fortunately of rare occurrence, for few cases terminate favourably. It is seldom discovered during the first months of pregnancy, for at this early period it is scarcely possible to distinguish it from natural pregnancy. If it be in the Fallopian tube or ovary, these become immensely distended into a species of sac or cyst, to the sides of which the placenta adheres; as the ovum increases this at length gives way from excessive distension, and the patient usually dies from internal hæmorrhage. The *graviditas ventralis* undergoes a similar termination at a later period, the placenta in this case being generally attached to some of the intestines. Of the four cases of *graviditas in substantiâ uteri* which have been observed, none have exceeded three months in point of duration.

Although the uterus does not receive the ovum into its cavity as it does in natural conception, it nevertheless undergoes many of those changes which are known to take place in regular pregnancy. The peculiar layer of coagulable lymph which is effused upon its internal surface, and which forms the membrana decidua of Hunter, is present, and the uterus undergoes a slight increase of volume.

As the ovum increases, excruciating pains are felt in the lower part of the abdomen, coming on at irregular intervals and of irregular duration, in some cases lasting for a short time, in others continuing for twenty-four hours. These attacks of pain are almost always accompanied with very painful forcing and tenesmus, and not unfrequently with a discharge of bloody mucus from the vagina. The tone of the crying and moaning, which the patient can seldom repress, is quite peculiar, so much so, that, once heard, it can never be mistaken in any succeeding case of this sort: the face is pale, and expressive not only of the most acute suffering, but of great anxiety and mental depression. Nevertheless, in the intervals of the attacks, she feels perfectly easy, and appears well and cheerful. During the attacks, there is obstinate constipation, which is attended with painful and fruitless efforts to evacuate the bladder and rectum.

The peculiar tone with which the patient expresses her sufferings was first noticed by the celebrated Heim, of Berlin, one of the most acute observers and accurate symptomatologists of the present day. By this symptom *alone* he has been enabled to detect the presence of extra-uterine pregnancy the instant he entered the patient's chamber, and before he had asked her any questions. Dr. Heim, who has had occasion to observe during his long and useful life very many cases of extra-uterine pregnancy, never found a case of tubarian pregnancy to last beyond two months, whereas ovarian and ventral pregnancy would last much longer, the former extending to five or six months' duration, the latter beyond the full term of common pregnancy.

In these cases the treatment consists merely in alleviating the pain by powerful doses of opium, during the paroxysms, and attention to the state of the bowels in the intervals. A putrid sanious discharge from the vagina frequently occurs, and arises probably from a separation of the decidua. In this manner the unfortunate patient is subject to occasional attacks of these pains, until, after a paroxysm more than usually severe, and frequently attended with the sensation of something giving way in the abdomen, faintings come on, speedily followed by death.

Although the symptoms, in the very earlier stage of extra-uterine pregnancy, are so obscure as to render it nearly impossible to detect its existence, still Dr. Heim has observed some facts connected with it, which are peculiar, and deserve to be noticed, *no morning sickness has been remarked in cases of extra-uterine pregnancy*; the patient could only lie upon the affected side, and the abdomen was observed to swell irregularly, not in the manner as in regular pregnancy. In tubarian and ovarian pregnancy, the pain was in the pelvis, but in ventral pregnancy it occupied more or less the whole abdomen, the parietes of which were very tender upon pressure; the symptoms of this last species of extra-uterine preg-

nancy were not unlike those produced in both sexes by perforation of the stomach, intestines, or œsophagus. In cases where the foetus died at an early period, the symptoms gradually disappeared after a time, especially when followed by the bursting of an abscess through the rectum or any other part.

In some cases of ventral pregnancy, the foetus becomes enclosed in a cyst, and is thus carried for several years, frequently becoming more or less converted into a calcareous mass; of this there are many instances on record. In other cases the parts of the child are gradually discharged through an abscess in the parietes of the abdomen, or into the intestines.

A most interesting case of pregnancy occurred to my respected friend Dr. Heim; his powers of accurate diagnosis enabled him to decide *confidently* as to the nature of the case, and, when the pregnancy had gone its full term, *gastrotomy* was performed; a living child was extracted, but the unfortunate mother perished. She could not be induced to submit to the operation until the severity of her pains had already exhausted her. The intestines were found much inflamed, and before the child could be removed and the cord tied, they had become so swollen that it was found impossible to return them entirely. It would be taking up too much of your time to enter into all the particulars of this highly interesting case, but the examinations which were made by the late Dr. H. Meyer, and the results of the *sectio cadaveris* contain so many interesting facts connected with the pathology of extra-uterine pregnancy, that they cannot fail to afford much instructive information. "I found (says Dr. Meyer) the patient suffering from the most violent pain of the left side, below the umbilicus; the features peculiarly contorted, the pulse full, hard, &c. In six days after (18th March, 1812), after the violence of her pains had been relieved by bleeding and other appropriate remedies, I examined her. The abdomen (externally) was somewhat larger and more distended to the *feel* on the left side, without being peculiarly painful on moderate pressure; the vagina lay quite to the right side of the pelvis, but the os uteri was so high up that I was unable to reach it. To the left side of the pelvic cavity, I felt a distended tumour like a bladder full of water, of about the size of a child's head, her breasts were somewhat swollen. Four weeks afterwards (16th April), I again examined her. The abdomen was fuller and more distended, especially upon the left side, than it ought to be without the presence of pregnancy, and this was the case higher up than before, still not painful on pressure. On examination per vaginam I came at once to an oblong hardish body resting upon the os coccygis; it required some force to pass my finger between this body and the bone, but still without exciting pain, and having reached the os uteri I convinced myself that it was the uterus which had sunk into this situation.

The fundus was more to the right side, but larger, softer, and more cushiony than the cervix and portio vaginalis, which were also larger than in the unimpregnated state, but harder than usual. The distended tumour which I had felt the last time on the left side of the pelvis, was still quite distinct but rather higher. I could not distinguish any solid substance floating in it as one does in common pregnancy. After the lapse of four weeks I again examined her. She had distinctly felt the motions of the child; the abdomen on the left side had increased in size, but was not painful upon moderate pressure; the uterus was not so low down, and no longer rested upon the coccyx; the cervix was softer and more swollen; the vaginal portion still somewhat hard. The bladder, like the tumour, could still be reached, but was much higher; the breasts were as in common pregnancy at this time. In June the abdomen was larger; the motions of the child were quite distinct through the parietes of the abdomen; the uterus as before, except that only a small part of its portio vaginalis remained hard. I was accidentally prevented from examining in July. On the day of the operation (28th August), the uterus was very low in the cavity of the pelvis, with its fundus pressed towards the right side; the whole vaginal portion was soft, and the os uteri so dilated that the finger could pass up, without pain, full an inch, where I could distinctly feel the child through the vagina, on the left side, where I had formerly felt the tumour." "At the post mortem examination, on the 31st of August, it appeared that the child, which was a stout full-grown boy, had been enclosed in a large membranous sac, chiefly on the left side of its mother's abdomen, covering the internal surface of the left os ilium, and extending over the promontory as far as the cæcum. From this part it extended, with the small intestines before it, on the left side, as far as the spleen and the great curvature of the colon, on the right side, to where the duodenum passes into the jejunum: the small intestines were not at all connected with this membranous sac. On its internal surface, corresponding to the cæcum, was the placenta, in no wise differing from that of a common pregnancy. The Fallopian tubes and ovaries, excepting an incipient state of inflammation, were natural. The uterus itself was at least three times larger than usual, and also somewhat inflamed, the os uteri dilated, and the tunica decidua distinctly lining the cavity of the uterus."

It would appear from the observation of Dr. Merriman on this subject, that cases of retroversion of the womb, where pregnancy has gone on to the full period, have been occasionally mistaken for ventral pregnancy. The pains have come on, but the child, from being felt between the rectum and cervix uteri and vagina, has been considered as extra-uterine. An abscess has formed, which discharged its contents into one or other of these passages,

and portions of the fœtus have gradually come away, as in cases of extra-uterine pregnancy. From the history of several cases published as extra-uterine, he has shown that the symptoms were evidently those of retroversion of the uterus during the earlier months of pregnancy. The patient had been subject to occasional suppression of urine and difficulty in passing her fœces; these symptoms had gradually diminished as pregnancy advanced, the os uteri could not be felt, or if it were capable of being reached, was found high up behind the pubes, the head of the child forming a large hard tumour between the rectum and vagina. The condition of the vagina afforded strong evidences of the nature of the complaint. On introducing the finger in the usual direction, it was stopped, as if in a cul-de-sac, but on passing it forwards the vagina was found pulled up behind the symphysis pubis.

In some of these cases, the uterine contractions gradually restored the fundus to its natural position, the os uteri descended from behind the pubes, and the child was born after long protracted suffering. In others, which have been mistaken for ventral pregnancy, the fundus has inflamed and ulcerated, and the child has been gradually discharged piecemeal. From these facts, Dr. Merriman is inclined to deny the existence and possibility of ventral pregnancy *in toto*, but here I must differ from him most decidedly; if there were no other cases on record than the one which I have just quoted from Dr. Heim, it would be sufficient evidence that such a species of pregnancy may sometimes occur; the operation of gastrostomy, the examinations per vaginam by Dr. Meyer, and the dissection of the abdomen after death, preclude the slightest possibility of doubt as to its having been a real ventral pregnancy; the facts, however, of the uterus being able to remain in a retroverted state until the end of pregnancy, and the effects thereby produced, are of the greatest importance, and demand the attentive consideration of the practitioner.

LECTURES

ON

FORENSIC MEDICINE,

DELIVERED BY

DR. HAY GRAHAM,

At the Westminster School of Medicine.

LECTURE XIV.

Insanity, continued.

GENTLEMEN,—1st. *Monomania*.—In this form of insanity the delusion is sometimes of such limited extent, and the intellect so little impaired in every other respect, that the patient appears perfectly sound in his mind so long as his attention is not directed towards the subject on which he is deranged. This appa-

rent sanity becomes the more remarkable when the monomaniac preserves sufficient presence of mind to conceal those ideas which, though he himself believes them to be true, he is aware are considered false and ridiculous by others, and may, therefore, injure him in their good opinion. Generally, however, the mental derangement is not of such limited extent in these partial delusions, as, from the descriptions of some authors, we might be inclined to suppose; for all the thoughts of these patients being concentrated on the objects of delusion, they are unable to employ themselves in other pursuits. Usually, those friends and relations who were the most beloved are forgotten, or, if remembered, it is only to entertain the most unjust suspicions, and to accuse them under the most frivolous pretexts. From time to time paroxysms of nervous agitation, accompanied with a more general state of derangement, suddenly break out. In that species of monomania which is marked by a predominant passion, or set of ideas fixed on one subject, the intellect being at the same time disordered in all other respects, there is nearly an equal degree of insanity as in mania; the only difference between these two kinds of madness is, that in the one the patient is constantly occupied with the same subject, whilst in the other he wanders incoherently on every subject. The predominant or exclusive ideas of monomaniacs are more frequently connected with their passions or inclinations than with the perceptions, talents, or other intellectual operations. The predominant passion, or set of exclusive ideas, seems to be connected, in the first place, with the particular character or well-marked disposition of the individual when in health;—thus, when the ambitious man becomes insane, he fancies himself a king, an emperor, or even the Deity; thus superstition or an excess of devotion may lead to the monomania of religious zeal; the love of wealth may give the false idea of large territorial possessions or inexhaustible treasures; and thus intense application of the mind on any one subject may give rise to a corresponding insanity; hence it is, that with many, derangement appears to be merely a morbid exaltation or increased excitement of the predominant character. Secondly, these exclusive ideas seem to be connected with the exciting cause of the disease:—thus terror sometimes produces a state of continual fear and timidity, and the alienation is connected with the concomitant circumstances of the case; the victims of treachery and false friends fancy they are surrounded with enemies, snares, and dangers; long-continued disappointments and vexations frequently throw the unhappy individual into a delirium of desponding melancholy. Sometimes we see cases where the predominant ideas and passions are diametrically opposite to the usual character and disposition of the individual; as where prodigality gives place to avarice; the absence of religion to an excess of devotion; and gentle-

ness, modesty, and humanity, to cruelty, boldness, and ferocity. At other times there is no clue conducting to the cause of monomaniac delusion, either as connected with the habits and character of the patient previous to the invasion of the disease, or as connected with the exciting cause which threw him into such a condition. But, how rarely do we know the secret passions, and, still less, the secret thoughts, of man!

The following are the principal species or varieties of this disease:—1st, *pride* and *ambition* create *gods, kings, emperors*, and *prophets*. These individuals carry their heads high and thrown back, walk with a stately step, maintain a lordly air in their intercourse with those around them, affect grandiloquence of speech, surround themselves with the emblems of power or the insignia of their divine commission; they talk but little, deeming it derogatory to their dignity, therefore they are not communicative, unless when they condescend to speak of their power and dignity; they usually assume a tone of authority, never that of humility; in short,

“ They assume the God,
Affect to nod,
And seem to shake the spheres.”

They are always surprised or indignant that any one should presume to dispute the lawfulness of their pretensions, refuse to comply with their wishes or obey their injunctions; and especially resent the indignity of being obliged to submit to their confinement and the discipline imposed upon them.

2nd. *Vanity* and *self-love*, rather than pride and ambition, create imaginary *queens* and *princesses*. These patients appear more desirous of distinction, the precedence of rank and the homage of beauty or high birth, the glittering of trinkets or the splendour of dress, than greedy of power. They walk with a stately air, are condescendingly affable, and ready to bestow patronage and protection on such as approach them with obsequious deference. Thus, even in madness, the foibles of the sex appear.

3rd. Many women bewail in tones of deep despair the loss of the attachment and affectionate regards they previously entertained for their husbands, their children, their family, and their friends; and the more their reason has remained unimpaired, the more poignantly do they feel the horror of their unhappy condition,—that vacuity in their affections, which leaves the heart hopeless, and fills with bitterness the cup of life.

4th. Violent and excessive sexual desires sometimes form the principal character of the derangement; this salacity, or nymphomania, shows itself by frequent sighing, and singing love ditties; the eyes roll in wanton glances, the cheeks are flushed, the bosom heaves, and every gesture exhibits the lurking desire, and is enkindled by the flame that burns within. The disease is strikingly marked by the move-

ments of the body, the salacious appearance of the countenance, and the lascivious language of the lips.

5th. The more delicate sentiments of *love* form the character of another species of derangement, which is termed *erotomania*. Sometimes it is the much-wished-for object of affection, which concentrates every thought of the patient; at other times it is an undefined sentiment of love, ardently felt, but not fixed on any object, which vaguely occupies the imagination. Love combined with religion sometimes gives rise to the sentimental love of God, of our Saviour, and of angels; thus the senses may be lost by conceiving a passion for an inanimate object,

“ — a dream of love,
Shaped by some solitary nymph, whose breast
Longed for a deathless lover from above,
And madden'd in that vision.”

In all these cases the object of affection takes exclusive possession of the mind; it is seen, heard, and felt, is addressed, embraced, and embellished with every charm which an imagination insanely fertile can conceive. Erotomania, or the monomania of love, is more frequent with women than with men.

6th. Those labouring under the monomania of religion are afflicted with scruples of conscience, and remorse for their past conduct; the dread of future punishment and everlasting pain continually haunts their minds, and strikes them with terror and dismay; some even believe themselves predestined to damnation, and already in the power of the devil, which is called *demonomania*; others devote themselves to the strictest observance of every religious injunction, pass their nights and days in prayer, mortify their bodies with sackcloth and ashes, with fastings, and other ascetic exercises; others behold visions, receive divine inspirations, prophesy, and issue their mandates in the name of the Most High, who has given them his divine commission to warn the human race of impending ills, and to convert sinners from their evil ways.

7th. That monomania in which the sad and painful emotions of the mind predominate, such as the *tædium vitæ*, vexation, anxiety, fear, and dread, more especially deserves the name of *melancholia*. A vast variety of ideas, whether true or false, may give rise to these emotions. Thus the monomaniac believes himself to be ruined, abandoned by his family, and betrayed by his friends; sometimes he fancies himself surrounded by spies, enemies, and assassins, or that he is subjected to the malign influence of evil spirits, or under the spell of witchcraft, or suffering from the deleterious effects of electrical and chemical agents, or of animal magnetism; others, conscious of the diseased state of their minds, imagine they will never recover, and despairingly regret being a burden to their families, and useless members of society. Oc-

asionally those circumstances which produced the insanity continue to weigh down the mind of the sufferer. One remembers that he has really been ruined, abandoned, and betrayed; another that he has been crushed in contending with powerful enemies, and that "might has overcome right." An habitual state of dread and fear is called *panophobia*; and *misanthropy* is that deep-rooted hatred and aversion, which some lunatics entertain towards their fellow-creatures. These are generally gloomy, solitary, suspicious, and reserved; their general appearance and expression of physiognomy, bear the impression of anxiety, fear, and timidity.

8th. With some the disease is characterised by excessive avarice, or the most unbridled passion of profuse expense, from the idea of possessing immense wealth.

9th. Hallucinations sometimes predominate; these lunatics imagine they hear voices, which continually follow and torment them, that they see the individuals who persecute them, or the evil spirits which haunt them, and are afflicted by other such like mental illusions.

10th. In other cases of monomania, the madness dwells on some particular condition of the body. Thus some monomaniacs imagine they have under their skin, in the throat, the stomach, the thorax, or some other part of the body, devils, enemies, animals, or poison, because, perhaps, they really suffer pain or experience an unusual sensation in those parts; others fancy their blood is tainted, that some disease preys on their vitals, and conducts them slowly to the tomb, that their body is without a soul on the vital principle, that their head is twisted the wrong way, that they are disfigured or metamorphosed into an individual of different sex, or into a wolf, dog, bird, or any other animal, that they are deformed and hump-backed, that their legs are no longer able to carry the weight of their bodies, that they are changed into a teapot, or made of glass, and are therefore afraid of being broken, and many other such fancies too numerous to mention.

11th. Monomania is often marked by a morbid excitement or exaltation of certain talents, which occupy their waking and sleeping thoughts; thus some are continually employed in endeavouring to discover the perpetual motion; others are constantly composing verses or making calculations, or practising music, or writing metaphysical dissertations, or other literary labours and mental lucubrations.

Mania is general insanity, or, at least, there is no permanent and strongly marked passion or predominant set of ideas. Some writers divide it into three varieties, which perhaps are merely different degrees of the same diseased state of the mind.

1st. With some maniacs the mind is continually on the stretch, and highly excited, exactly similar to what takes place in inipient intoxication, as when a person has

taken a dose of laudanum or an extra glass of wine. These talk and chatter a great deal, frequently expressing themselves upon every subject with surprising volubility and occasionally with much judgment and sagacity. This morbid activity of the mind prevents them from remaining long in the same place, or assiduously applying themselves to any occupation; they are great babblers, thoughtless, careless, and mistaken in their views, and cannot for any length of time be trusted to themselves, or allowed to indulge all their whims. On meeting with the smallest resistance they grow angry, and frequently work themselves into a state of frenzy, that at last it becomes necessary to place them under confinement. Then they believe themselves to be persecuted, and entertain the greatest hatred towards those by whose influence they were confined.

2nd. With others, who are of a quiet disposition, we perceive a mixture of reason and insanity, so that they may be said to have a method in their madness; their mind, if left to itself, would fall into the most complete derangement, into endless aberrations of judgment, confounding causes with effects, and drawing false conclusions; if, on the other hand, their attention is engaged by interesting objects, as conversation, reading, or writing, they frequently, for the time being, recover their reason and intellectual capacity.

3rd. The most intense degree of mania is that where the ideas are rapid, confused, and expressed with nervous agitation, shouting, singing, menaces, and other ungovernable and tumultuous emotions of the mind, during which they are scarcely sensible of external objects, their sense of consciousness is obtuse, and their intellectual capacity confined to narrow limits; the power of recollecting the past is very inert, and the memory of the present equally feeble. The passions and affections are evanescent and sometimes altogether dormant. It is often impossible to engage their attention, and even when engaged one rarely obtains a correct answer to the questions put to them; sometimes, however, they will enter into a long train of reasoning, and hold a connected discourse, but at all times with ideas originally false. Sometimes these maniacs are mischievous, furious, striking, breaking, and destroying every thing within reach. Often they are most disgustingly filthy in their persons and habits. When cured they generally have at least an indistinct remembrance of every thing which occurred, or which they had seen, heard, thought, willed, and executed during the continuance of the disease.

4th. Dementia, or fatuity, this is either primitive or secondary; in the latter case it succeeds to mania, or monomania; it may be considered the natural termination of these diseases, when not cured, and when the patients live a sufficient length of time for such a termination to take place. Dementia is often primitive when it accompanies decrepitude of

advanced old age, whether with or without organic affections of the brain. It is also common to epilepsy, drunkenness, excess of venery, and masturbation. Also with individuals who have experienced inflammations, or other severe diseases of the brain. The principal characters of dementia are the obliteration, or loss, of the memory of present impressions, whilst the remembrance of past events is often preserved with all the freshness of a recent occurrence, a want of connexion and association amongst the ideas, or train of reasoning, and a perfect indifference to all things present or to come. These patients are generally quiet and contented, occupying themselves but little, frequently talk to themselves, uttering unconnected words or broken sentences, and laugh or weep without reason: in a more advanced stage they are in a state of complete stupidity, having only a few detached or isolated sensations, yet, before arriving at the last stage of mental imbecility, there are fleeting moments of excitement, during which they grow angry, or become violent, and break or destroy, and are able to connect their ideas to reason, and sometimes to write letters not altogether destitute of sense. Notwithstanding the intellectual faculties are in a state of extreme torpidity, or decay, they are able to recognise their friends, to play very well at billiards and other games of calculation, and to satisfy the wants of nature. Women are able to pursue their accustomed occupation of needle-work, or such like; the talent of music, or drawing, continues in a high degree of perfection in the midst of the general wreck and annihilation of the other faculties. In this species of derangement much of the time is passed in sleep; the physiognomy loses its expression, and the voluntary movements become at length very weak, and the muscles paralysed; these also grow very filthy. Occasionally dementia is so slight as to be scarcely perceptible, but, in these cases, if they are required to write it is perceived they often forget entire words and letters in spelling, and that the style is no longer such as it was wont to be.

Some maniacs are in a state of continued stupor, they seem to be without wants, without ideas, and without desires; their eyes are open without seeing or observing; they neither listen nor yet speak; their skin is but little sensible; they would remain during the night as well as during the day in the open air, if they were not led to their apartment, to their meals, to the fire, and to their beds. When cured some say that they were almost deprived of the faculties of thought, will, and sensation, and that their existence was mechanical, or that of an automaton; others that their ideas were in such a state of chaotic confusion as not to be able to arrest or dwell on any of them; others compare it to extreme debility of mind, or a sort of mental atrophy. Sometimes this acute state of dementia is only apparent, the patient living in a state of mental

absorption, without uttering a single word, either because he imagines that should he speak he would instantly die, another because he has received an order to be silent, and some from one motive and others from another.

Idiotism, or Fatuity.—According to Mons. Pinel, idiotism is the fourth species of mental alienation; he defines it a sort of stupidity, more or less strongly marked, consisting of a very limited number of ideas and a want of decision or nullity of character. This definition includes both those idiots whose intellectual faculties have never been developed, as well as those who have suffered a diminution of mental capacity or obliteration of their reasoning faculties subsequent to their development in after-life. M. Esquirol gives the name of idiotcy to that state of the mind wherein the intellectual faculties have never been developed, whilst the accidental loss of thought is more properly referred to dementia. This distinction is well founded, for these two affections are different in their origin, and each is marked by characters of its own.

An idiot is one, who, from his birth, is more or less completely deprived of understanding; he forms one of a very numerous family amongst the human race, for there is a great number of degrees and shades of difference in the interval between the standard of mediocrity, or common sense, and the entire absence both of understanding and of the functions of the external senses: thus some idiots have merely a vegetative existence, they seem unacquainted with every species of sensation, and feel neither hunger nor thirst, nor any sort of pain; they are insensible to the inclemency of the season, and heat and cold make no impression on them; when food is put into their mouth they swallow it; when they open their eyes it is without being sensible or perceiving the objects around them. M. Esquirol speaks of a little idiot, eleven years old, who was deaf, dumb, and blind, and found almost lifeless by the side of its mother, who had been dead several days. Some idiots manifest a few sensations; they know their food, take hold of it, and eat it; they behold objects and know how to avoid them; they turn round when they hear a noise; if pinched, they endeavour to withdraw their bodies from the pain, and, sometimes, when vexed or contradicted, they put themselves into a passion; but they know not how to make use of external objects; they are unable to put on their clothes when exposed to the cold; they remain without seeking to change their place, and only think of eating when food is set before them; the whole extent of their language, by which they communicate their ideas, consists of a few simple signs and sounds variously modulated. Some faint traces of intelligence are to be met with in those of a higher station; the attention of these is sometimes engaged by

the impressions made on their senses; they seem to look at certain objects with a mingled feeling of pleasure and curiosity, will go of their own accord to any food they see and carry it off; they recognise those who are in the habit of taking care of them; sometimes, by means of cries and signs, they point out the objects they want, and express the pleasure or pain they experience. Yet it is necessary to put on their clothes, to put them to bed, or to place them where it is desired they should remain; but they are incapable of satisfying their wants, and all that can be done in the way of language is to make them remember one or two words by continually repeating them under certain circumstances. After these idiots, we may rank those who can recognise the members of the family with whom they live, and to whom they show a degree of attachment, as can help to dress themselves, understand some questions, can fetch their food, and imperfectly articulate several words; yet they are incapable of any kind of work, pass the entire day in lying down, sitting, or strolling about.

The term imbecility has been given to that species of idiocy where the intellectual faculties are only developed to a certain point. Consequently *idiots* may be considered such as are more or less *completely* deprived of understanding; and those with whom there exists some connected ideas, a limited use of speech, a little memory, and a consequent degree of understanding, may be termed natural fools. These natural fools, like the idiots, may be divided into several classes, according to the development of their faculties; but it is unnecessary to enumerate them, or enter into such distinctions. Generally speaking, they are capable of being employed in such simple operations as require but little judgment, the extent of their language is confined to a small number of words badly pronounced, but they cannot be taught to read, or write, or learn any useful trade; they know the value of money, and how to make use of it; many are inclined to steal, and are very cunning, which causes them to be supposed having more understanding than what in point of fact they really possess. It is difficult to explain the remote causes of this disease; in some families there seems to be an unknown hereditary predisposition, and several of the same family are subject to it. This is exceedingly common in those countries where cretinism is of frequent occurrence. Heavy affliction and painful losses pressing upon the mind during pregnancy appear to be sometimes a cause of idiocy; injuries on the head of the infant during labour, blows and falls upon the head, terror, inflammation of the brain, convulsions, epilepsy, may each of them be followed by extinction of intellect, or fatuity; but, more frequently, we are at a loss to attribute this disease to any preceding cause.

That species of fatuity which is known by the name of cretinism, proceeds from a local

cause; thus the victims are common in the valley of the Rhone, which is scarcely more than a mile or two in breadth, and walled in on either side with lofty mountains abounding with glaciers, and covered with eternal snows. Those parts more remarkable for those unhappy beings, are in the neighbourhood of marshes caused by the overflowings of the Rhone, exposed to a south-west aspect, and completely sheltered from the north-east winds. Hence the reflected rays of the glowing sun, concentrated, as it were, into a focus on these unhealthy places, produce a dense and heated atmosphere, which, combined with the enervating influence of the south-west, seem to produce that injurious impression on the nervous system which gives rise to the disease; for it has been observed that if young children in whom there are indications of cretinism, are removed to a higher part of the mountains, they gradually recover from the disease, even though they happen to be the offspring of cretins, whilst the children of those living in elevated situations are never afflicted with the disease. From hence, also, we may conclude that cretinism is not, strictly speaking, an hereditary disease, although there may be a greater predisposition towards it in the offspring of those who are afflicted with it, than in those who are free from it.

The causes of mania are often as obscure as those of fatuity; frequently it is hereditary, arising from some taint in the constitution, or morbid condition in the nervous system of the parents, thus those who are afflicted with insanity, frequently give birth to children who become insane, especially should they be born after the disease has declared itself; also scrofula is a frequent cause of this predisposition; the children of habitual drunkards, as we have already observed, are often idiotic or insane, and there is every reason to believe that those labouring under nervous diseases, produced either by physical or by moral causes, as severe grief, or hysteria, or epilepsy, occasionally give rise to a similar predisposition. In addition to these are to be enumerated the various physical and moral causes which act powerfully on the nervous system, and thus affect the brain. But very frequently insanity declares itself without any such apparent predisposing cause. On examining the brains and skulls of those who have died insane, we occasionally meet with various organic lesions of those parts in idiocy or fatuity, and sometimes in insanity. The tables of the skulls, together with the diploë, are greatly thickened and hardened, of the solidity almost of ivory, this is particularly the case in idiocy, where the cranium is generally of unusually small dimensions, not exceeding those of an infant, and those parts of the brain, which phrenologists consider as the seats of the intellectual and moral faculties of the soul (which are situated in the front and sides of the head), appear not to have been developed; hence the foreheads of these individuals are singularly depressed

and narrow, which gives them that expression of vacuity, which stamps the character. Sometimes the substance of the brain is of a firmer consistence than usual, at others it is reduced to a soft pulpaceous mass, but more frequently no alteration whatever is visible in its consistence. Some authors have imagined they had discovered a peculiar configuration of the cranium in those afflicted with insanity, but our celebrated countryman, Willis, who had paid much attention to this part of the subject, observed that though sometimes there was some peculiarity, yet more frequently there was none whatever. Consequently, gentlemen, no reliance is to be placed on such distinctions, for the shape of the head and the texture of the brain offer no visible mark by which the disease may either be recognised or predicted.

It is not the province of my chair to enter upon the curative means to be employed in the treatment of these maladies, of course such means must be regulated by the history of the case, the pathognomic symptoms of the disease, and the moral and physical causes which gave rise to it.

I beg to observe that monomania, and some particular cases of fatuity, where only a single faculty is manifested, or a single faculty deranged, seem very much to favour the doctrines of phrenology, viz. that the mind contains a given number of primitive faculties, and that the different parts or convolutions of the brain are the seats and organs of these faculties, according to the intellectual, moral, and physical qualities of man; and whereby the mind manifests those several qualities. As the brain consists of two hemispheres, each corresponding with the other, so is there a double set of organs, and hence is it, according to these doctrines, that very considerable injuries may be sustained without the faculties of the mind being sensibly impaired, as a man may lose the sight of one eye and yet the perceptions of colour, form, and distance receive no diminution.

Reviews.

The Practice in the Liverpool Ophthalmic Infirmary, for the Year 1834, being the First Special Report. By HUGH NEILL, Surgeon to the Charity. Pp. 55. Longman, 1835.

THE author's first object in the publication of this Report is to show to the Governors the number and variety of cases which are relieved in the institution. In the preliminary observations we notice, that in Liverpool, as well as in London, individuals in circumstances capable of remunerating a practitioner will suffer the disgrace of receiving advice gratis sooner than part with their money. We are glad to find Mr. Neill had the boldness to refuse such relief. The system is a disgrace to any elee-

mosynary institution. But to the contents. In the year 1834, 1,768 cases were treated, thus affording to the author a very ample field of practice. After giving a table of the diseases admitted, he proceeds to remark on some of the most interesting cases and affections.

Amaurosis the author has found to arise frequently from what he terms "astringent vapours," a circumstance which, he remarks, has not, he believes, been before noticed. In one case he attributes the attack to the vapour of coal tar. The man's employ is "applying coal tar to the concave surface of the arches of canal bridges;" he is now blind. Many men, it would appear, in the same employ are similarly affected,—a case is referred to as arising from the fumes of sulphur. *Strychnine*, the author states, is the chief and best remedy; he bleeds, blisters, purges, or gives tonics according to circumstances.

One extract will suffice to show the character of Mr. Neill's Report. P. 30.

Ulcers of the Cornea.

"Ulcers of the cornea are seldom the consequence of pustules, if the surgeon be applied to in time. Ulcers generally occur in strumous habits. The hospital surgeon is usually applied to when there is intolerance of light and lachrymation: and when he examines the eye, he finds one or two large vessels, twisting and twining from the outer angle of the eye; they may come from any part, but usually from the outer angle. When they reach the edge of the cornea, they appear to raise themselves above the conjunctival surface, they hang and twist about the edge of the cornea for a time, and ultimately rush forward upon it. They generally stop as near the centre as possible, and begin to show a little soft pulp at their extremity; this is an absolute ramollissement of the exterior surface of the cornea. The surgeon should immediately destroy this substance by the application of the nitrate of silver pencil. If this is not done a permanent speck remains. The false texture should be immediately destroyed, and the slough separated, in the event of which the case will go on well. To apply the caustic with advantage requires some dexterity, the patients being usually young. The little one should be laid on the knee of an assistant, mother, or nurse, turn the head back into your own lap, separate the lids, then apply your pointed pencil steadily, quickly, and surely. Do it *well at once* and you save much after annoyance; for reasons, known both to you and the child, this operation cannot be done so well the second time, the 'young one begins to know you.' The after treatment should consist in frequent fomentations with poppy-head infusion, and then a weak solution of sulphate of zinc.

"While on this subject I must advert to what has frequently been impressed on my observation, from consultations during the last twelve months of my practice, viz. that the

use of *acetate of lead*, as a lotion, is bad. In several cases, treated afterwards by me, where this salt had been employed, by gentlemen previously in attendance, a white slough, very hard to be separated, was created. When the usually great irritation has subsided, I stimulate the granulating ulcer with one grain or two grain drops of the nitrate of silver. The only internal remedy, which I give, is the blue pill mixture, three grains of the mass should be given in mucilage every night or fortnight."

The following is interesting in a metaphysical as well as in a surgical view:—

"October, 1834. There is at present in the Ophthalmic Infirmary, under Mr. Neill's care, a case of very great interest. The patient is a little girl, who was *born blind*. About three years ago Mr. Neill operated on the right eye, the operation was successful, and she obtained sight; she was then in her eighth year. On Saturday last, the 4th instant, he operated on the left eye, in the Slater-street Institution, with a similar happy result.

"This little creature, born blind, and for eight years in darkness, is now in full possession of this most precious sense. She can distinguish colours and the smallest objects. The knowledge of distance, after the first operation, was for a long time imperfect. The first object, which was presented to the eye, was a halfpenny; for weeks afterwards every circular object, no matter how large, or what colour, was called a halfpenny.

"When blind her residence was in Dovecourt, School-lane; she was then familiar with 'every nook and corner' in the neighbourhood. When she obtained sight she often used to lose her way, sometimes even close to her own door; the instant this would occur she would shut her eyes, and feel round until some known object was touched, then with her eyes closed she would hurry home, guided by her accustomed sense of touch. She is a pretty intelligent child, and is a pattern of neatness."

The Report does credit to Mr. Neill;—we would recommend him to continue it annually. The profession may derive some information from the present.

The Dublin Journal of Medical and Chemical Sciences, January.

The succeeding are the inferences made from a careful and elaborate inquiry into the influence of salt on the animal system, and its existence in the fluids in certain proportions in health and disease. He reiterates the doctrine that an excessive use of salt predisposes to *scorbutic* and other affections.

Dr. Muteer on the Injurious Effects of Salt on the Animal System.

"From what has been stated we may draw the conclusion, that the ultimate effect of an excessive use of salt is a debilitated state of body. Hence the constant appearance of such symptoms as depression of spirits, languor, lassitude, and want of muscular strength. We

have particularised some others, occurring in cases of a scorbutic character, that have frequently fallen under our observation, and where the immediate action of salt upon particular organs was developed; in most cases, however, the effect produced may merely be a debilitated condition of the body. This in itself may not be of serious importance, but as it renders the subject more susceptible to epidemics, it may be the source of much suffering and mortality. In large towns fevers, dysentery, and cholera often exist to a great extent among the humbler classes, while the rest of the community are quite free from them. Bad air may predispose to such epidemics, want of proper clothing is still more likely, but the difference in the diet is that to which, by the universal consent of writers, the greatest effect is to be attributed."

Dr. Graves has published a lecture on the subject propounding similar views.

We have not at present space for the notice of a most instructive case, by Dr. Montgomery, of a fibrous tumour, arising from the posterior surface of the uterus, so large as to entirely obstruct delivery, and where the Cæsarean operation was performed, though unsuccessfully. On a future occasion we may lay it under our readers' notice.

Page 49. The next is a "*Case of Recovery from Suspended Animation*. By Dr. Macwhirter."—"I was called, at about half-past 11 P.M., to a lady, who had been several hours in labour. I found the *os tinæ* expanded to the extent of a crown-piece, the membranes pressed forward by every pain, and the presentation 'breech' pain recurring regularly and forcibly every four minutes. About a quarter before 1 the membranes gave way, the liquor amnii was discharged, and the labour, which was a first one, advanced slowly, until half-past 1, when the breech was born. Suspecting that resuscitation would be necessary, I desired the nurse to have warm water at hand. The body and head were long *in transitu*; the funis was round the neck twice, I disengaged it, but could feel no pulsation. I got my fingers into the mouth of the foetus, and succeeded in bringing it beyond the verge of the perineum, but it did not breathe. In about ten minutes, by management and the uterine action, the head was delivered, and along with it the placenta.

"The infant appeared *dead*, indeed it was thrice felt convulsed *in transitu*. The face was as white as paper, but there was some colour in the lips, still no pulsation of the heart could be felt.

"I placed the child, with the placenta attached, in a warm bath, gently inflating its lungs with my own breath in the usual way; rubbed brandy on the chest, abdomen, and head, spine, extremities, &c. As the funis, when cut, did not bleed, I therefore tied it. After immersion for about half an hour I took it out of the bath, dried and wrapped it in a warm flannel, and made the nurse carry it

near the fire. I then continued the gentle inflation from time to time, and the spirituous friction, to the extent of nearly two bottles of brandy and whiskey, occasionally slapping the bottom, when, at length, about forty or fifty minutes after birth, it gave a sob. This was indicative of existing life, and encouraged me to persevere. It continued to sob, or gasp, at intervals of a minute or two, and I now found that I could feel the heart beat.

"The above means were most perseveringly continued until the circulation and breathing very gradually increased. At the end of an hour and a half the child gave a whimper; the eyes opened; the lips became red; it breathed regularly; cried lustily. It lived and continues to live."

The Edinburgh Medical and Surgical Journal. No. CXXII.

The present number is enriched with numerous select communications from the Medico-Chirurgical Society of Edinburgh, and the present fasciculus is the second that has been published, the first having appeared in the last quarterly number. We shall not enumerate all the subjects that have been discussed in that Society, and which were thought worthy of publication, but shall notice those articles we believe to be the most interesting. In reviewing the contents of a contemporary Journal—its scientific productions—we approach the subject with considerable delicacy; for the character in the play said "Man is but man after all." Nevertheless, as we made a passing comment on our other cotemporaries, we may remark on the present, that in its style, and in the value, and in the variety of its matter, its editors need not blush when contrasting it with others.

The first short article is by Dr. John Reid, on Phlebolites, a collection of small rounded bodies, occurring, in the present case, in the veins of the ligamenta lata of the uterus: they have not been noticed before by English authors. Their presence is usually in the veins. Dr. Reid has seen five cases of them—thrice in the uterine veins, once in the vesical, and once both in the vesical and uterine. They varied in magnitude from a millet seed to that of a pea, and in number from two to more than a dozen. Their situation, we are told, is "loose, in dilatations of the veins, allowing sufficient space for the blood to pass between them and the coats of the vein." Their composition, according to Mr. Kemp, appears to consist of the same materials as bone, namely, phosphate and carbonate of lime with animal matter; they are found surrounded by fibrous matter. With respect to their mode of formation nothing is determined; whether it be the result, as the author says, of a vital or a chemical action is but conjectural. Further observations are undoubtedly desirable. In the depending veins only have they been found situated. Cloquet and Beclard have noticed

them, but have not arrived at more correct data on the subject than Dr. Reid.

Immediately succeeding the above article is a "Case of Rupture of the Tendon of the Biceps Flexor Cubiti," by Sir George Ballingall. It shall be extracted verbatim.

"Mr. D— was a healthy active man, about 50 years of age, well known to many members of this Society as an eminent chemist and druggist. While raising a heavy weight with the tips of the fingers of his right hand, he suddenly felt a snap, accompanied with a numb pain in the lower part of the arm, a little above the elbow. The weight instantly dropped from his hand, and he was conscious of an inability to use his arm as formerly. On endeavouring to take off his coat, within a few seconds after the accident, he had great difficulty in doing so, owing to the swelling which had already taken place in the arm. On examination, there was observed a large tumour about the middle of the arm, occupying the seat of the belly of the biceps muscle. This being considered by Mr. D. as arising from effusion he had a pretty tight bandage applied. He now felt scarcely any pain, and comparatively little inconvenience in the use of his arm. Next morning, on removing the bandage, and examining the arm carefully, Mr. D.'s son, a medical man, was of opinion that the tumour, which had now increased much, arose entirely from the retraction and swelling of the biceps itself. In this opinion he was confirmed by finding, that in the hollow which existed below the tumour there could be detected a body apparently the tendon of the biceps, which was loose at one extremity, and could be moved from one side to the other with great facility. Bandages were now applied, consisting of two pieces of leather accurately and tightly laced, one to the arm and the other to the fore-arm, with a strap passing from the lower to the upper piece of leather, for the purpose of keeping the arm in the bent position. Owing to the patient using his arm much the bandages were not accurately applied, and after ten or fourteen days they were thrown aside. The tendon has gradually contracted adhesions to the neighbouring parts; and although there is considerable swelling of the muscle, and some difference between the form of the two arms, yet the patient can use the arm tolerably well. It is not by any means so strong as formerly, and he cannot make any great exertion with it. He experiences difficulty; and some degree of pain or cramp, in attempting to raise a weight with the points of his fingers, and finds the power of pronation considerably impaired in the affected arm.

"The preceding history of this very rare accident was drawn up at my request by my friend Dr. Balfour. Having been in the country at the time Mr. D. sustained this injury, I had no opportunity of examining his arm until nearly a week afterwards, when I was led, as others had been, to conclude that the tendon of the biceps was undoubtedly rup-

tured, or perhaps rather torn from its attachments; for, although the tendon could not now be moved freely from one side to the other, yet, upon throwing the muscles of both arms into action by bending the fore-arm against a resistance, the tendon of the left biceps sprung out as it were, and became tense, while no such thing happened in the right arm,—the flexion of the fore-arm being apparently accomplished by the *brachiius internus*, the flexors of the carpus and fingers.

“On examining the arms a few days ago, at the distance of eight months from the accident, I find that there is a considerable difference in their figure, the belly or prominent part of the biceps in the right or injured arm being higher up, and somewhat different in shape from that of the left. Immediately below the junction of the fleshy with the tendinous part of the muscle there is a considerable thickness or swelling, apparently in the tendon; and when the muscle is thrown into action, the tendon of the injured arm is less prominent and distinct than that of the opposite side. Mr. D. still finds the strength of the right arm considerably impaired. He complains of some difficulty in pronating the hand, and more especially in alternately rotating the radius outwards and inwards, as he has occasion to do in the act of pouring any powdered substance out of a wide-mouthed bottle into the scales. This last-mentioned circumstance I am particularly induced to notice, because, from the actions usually assigned to the biceps, it might have been supposed that the act of supination, rather than that of pronation, would have been impaired.”

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AN ESSAY ON THE USE OF THE
ALCOHOLIC EXTRACT OF THE ACO-
NITUM NAPELLUS, IN THE TREAT-
MENT OF ACUTE ARTICULAR RHEU-
MATISM.

BY DR. LOMBARD.

*Physician to the Civil and Military Hospital
at Geneva.*

THE medical properties of aconitum have appeared to me so remarkable, that for the last two years I have made it the object of my especial researches, the results of which I am desirous of communicating to you, as far as regards the treatment of acute articular rheumatism. The preparation of aconitum which I have employed is an alcoholic extract, made with great care. The common extract is frequently inert, either in consequence of the very large quantity of amidon and other vegetable matters which dilute the active principle, or because it is badly prepared. The expressed juice of the plant, after undergoing a slight boiling in order to coagulate the vegetable albumen, is evaporated in a marine bath, redissolved in alcohol, filtered, and again evaporated at a moderate temperature. According to this method, the volatile parts are not

lost, as in the ordinary preparation of extracts, and the active principle, which, according to the opinion of some chemists, appears to be destroyed by heat, has not undergone any injurious modification. The result has proved that these precautions have not been altogether useless, inasmuch as I have derived great advantage from the extract thus prepared, whilst a great number of authors have declared the extract of aconitum an inert preparation, from which no benefit can be obtained, although employed in very large doses. The alcoholic extract has produced very marked effects on the patients I have treated with it. All have been speedily cured, and without the super-vention of any bad symptoms, as the following cases will prove.

CASE I.—*Acute Rheumatism of the Right
Shoulder-joint, of a fortnight's duration,
cured in forty-eight hours by the Aconitum.*

—M. G., upwards of 50 years of age, generally enjoying good health, never having suffered from gout or rheumatism, was attacked with acute pain in the left wrist and right shoulder-joints; the integuments covering the wrist are red and tumefied, and the slightest pressure or motion increased the pain in the parts affected. This state continued for eight days, during which mercurial frictions and opiates were had recourse to. During the second week, the affection of the wrist was partly removed by large doses of tartarised antimony and blisters, but the pain of the shoulder remained quite as severe; it completely prevented his sleeping. Under these circumstances, I administered half a grain of the alcoholic extract three times a day.

The effects of the medicine were very evident even the first night; the patient slept better than he had done hitherto; he could move his arm more readily, and the pain was lessened. No other effects were produced.

The next day the pain was so much diminished that motion was scarcely at all inconvenient, and the patient determined to resume his occupation, an amanensis. Same prescription.

The third day after the administration of the aconitum, and the nineteenth after the commencement of the complaint, pressure on the shoulder did not cause any pain, and the motions of the right arm were nearly as free as those of the left.

This case is a remarkable instance of a cure being effected by the alcoholic extract of aconitum. We find a disease of a fortnight's duration, and which had resisted various modes of treatment, much diminished in the space of twenty-four hours, and removed in three days. We cannot explain this rapid cure, other than by the specific action of the aconitum on the disease of the joint, for no evacuation had taken place which could give rise to the idea of derivation; the patient had neither sweats, diarrhoea, nor vomiting, and did not appear to experience any other effect from the medicine

than its beneficial and curative action. The cure has not been less lasting than speedy, for, for the last five months, M. G.'s health has been excellent.

CASE II.—Articular Rheumatism of the Shoulder, of three weeks' duration, removed in forty-eight hours by the Aconitum.—Vittel, a woman fifty-two years of age, was admitted into the hospital on the 18th of December. She says that, many years ago, she had acute articular rheumatism, which obliged her to keep her bed for many months, and to walk for some time afterwards on crutches. From that time she has enjoyed good health, with the exception that for the last three weeks she has suffered from severe pain in the left shoulder-joint. Within the last two days the pain has become so severe as to prevent all motion of the arm. The articulation is extremely sensible to pressure anteriorly; the digestive apparatus is not out of order, nor is the circulation disturbed. Leeches applied to the seat of the pain, and opiates, afforded no relief; accordingly, the day after the patient's admission, I ordered a grain of the alcoholic extract of aconitum four times a-day.

Eight grains were accidentally administered, and, as no injurious consequences ensued, I ordered two grains every two hours. The pain did not diminish greatly, but motion became much more easy. The third day after its administration, the benefit received was so great that the pain might be considered as three-fourths less than it had been; motion was no longer inconvenient, so that the patient could dress herself, and there was no pain on pressure. Vittel considered herself cured, and was desirous of leaving the hospital, but she staid two days longer to be certain that the cure was complete.

In this case, as in the preceding, the administration of the aconitum was quickly followed by the removal of the disease. The pain caused by moving the arm was so intense as to induce the patient to scream; nevertheless, forty-eight hours were sufficient to remove it completely, and restore the arm to its natural condition. No injurious effects were produced by the administration of from 20 to 24 grains of the extract in the course of three days, with the exception, that at the end of that time diarrhoea coming on, no medicine was employed; but the cure remained perfect.

CASE III.—Acute Articular Rheumatism occupying successively different Articulations, speedily cured by the Aconitum.—Soulier, a tinman, 30 years of age, was admitted into the hospital with rheumatism of six days' duration. He states that this is his first attack; he was seized with acute pain in both ankles; two days afterwards the knees became affected and tumefied, and finally the hip-joints the day before his admission. The pain appears to be chiefly situated in the fibrous parts, and

it is increased under pressure. The symptoms are attended with fever and anorexia. He was ordered half a grain of the alcoholic extract, at first five, then six, times a-day.

At the end of forty-eight hours the symptoms were much improved; the pulse, which was at first 100, was reduced to 80; the anorexia had disappeared, and the pain had left the joints which were affected, but had attacked the great toes, which were red and tumefied. Let him continue.

The day after, the tenth of the complaint, the toes are free, but the hips are again rather painful. On the 11th the left wrist and some of the articulations of the hand became inflamed, the integuments being red and tense. The dose of the extract was gradually raised to six grains in the twenty-four hours. On the fourteenth day he was totally free from complaint, and had the perfect use of all his limbs.

This case will furnish us with many important remarks. In the first place, we see symptoms of fever, and general malaise removed in forty-eight hours; we find the pain and tumefaction occupying successively different joints, but not affecting any one longer than two days, owing to the use of the aconitum, which pursued the rheumatism wherever it showed itself, and did not allow time for disorganisation to take place in the tissues. The following case will illustrate still more the remarkable property of the aconitum in removing the rheumatism wherever it tends to show itself.

CASE IV.—Acute Rheumatism occupying different Articulations, and yielding in seven days to large doses of the Aconitum.—Marie P—, washerwoman, 31 years of age, was attacked, three years ago, while engaged in a heavy wash, with articular rheumatism, which kept her in bed for three months, and rendered her a cripple for a long period. Eight days ago, she was again occupied in a very heavy wash, when she was similarly affected. The chest and head, and afterwards the limbs, were successively the seat of acute pains, which were soon accompanied with fever, and obliged her to keep her bed.

I saw her the ninth day of the attack, when she had a pulse at 90, with a hot skin; the left knee tumefied, hot, and very painful on pressure or motion. Both the hip-joints were also the seat of severe pain. Notwithstanding the presence of the catamenia, I ordered half a grain of the aconitum every two hours, in order to relieve the intense agony under which she was labouring, and which completely deprived her of rest. She slept the first night after its administration, and the pain was much diminished; the hips were free, but the knees were still painful. Ordered a grain of aconitum every two hours. This night, as likewise the preceding, the patient perspired freely. The rheumatism left the knees and invaded the great toes, which became tumefied and

painful. A grain and a half of the extract every two hours.

Pain has nearly entirely ceased; the lower extremities are free, so that the patient can stand for a few seconds; the increased perspiration continues; the catamenia are still flowing. Continue.

The next day, the thirteenth after the attack, the left shoulder, elbow, wrist, and the articulations of the hand, are the seat of acute pain and considerable tumefaction, more especially the hand; nevertheless, she has slept a little during the night; the pulse, which was previously at 80, has risen to 96; appetite and digestion good; perspires very freely; the menses have nearly ceased. To have three grains of the extract every second hour.

The shoulder and elbow are nearly free from pain, but the wrist remains swelled and painful; the joints of the hand are much improved, but those of the thumb remain swelled, and are rather painful on pressure; appetite not so good; pulse 96; bowels not open since yesterday. Three grains of the extract every hour and a half.

The day after, all the joints are free, but motion of the wrist and feet is still rather difficult. The right shoulder has become rather painful. Six grains every two hours.

The patient became convalescent, but relapsed in consequence of an act of extreme imprudence; while in a state of perspiration she rose only half dressed, and walked out for a couple of hours. In a day or two she was suffering intense agony in all the joints of the right arm; the slightest motion made her scream, but there were not any symptoms of general irritation. She began again with six grains of the extract, which was soon increased to nine, every two hours, by these means the pain and tumefaction were gradually removed, leaving the large joints first, those of the phalanges remaining inflamed two or three days after the shoulder, &c., were free.

As in the preceding case, we observe here the pain yields in a few hours, and the rheumatism itself is removed in 36 or 48 hours, and while in the previous attack the patient was obliged to keep her bed for three months, she was able to leave it this time in eight days. When, by a serious act of imprudence, she caused a relapse, the aconitum again speedily removed the complaint. The administration of very large doses of the aconitum, from three to four and a half scruples in the day, has not produced any injurious effects, neither on the alimentary canal, nor on the nervous system, nor even on the catamenial secretion, which continued to flow, in spite of the pain and the remedies employed. But the chief symptom which appears to result from the use of the aconite, is the abundant and almost constant sweating, but this is not to be regarded as a symptom constantly produced by this therapeutic agent, as this is the only case in which I have observed it. In all the other cases a cure was effected without causing an increase of the perspira-

tion, and even in Marie P., the subject of the present case, symptoms of improvement were not invariably attended with perspiration, as I observed during the relapse. Another remark is, and it will be verified by the sixth case, the rapidity of the cure in the large joints as contrasted with the smaller ones; the former were relieved long before the latter, which continued for several days tumefied and painful on pressure.

CASE V.—*Acute Articular Rheumatism with considerable effusion into the Right Knee, speedily cured by the Aconitum.*—Joseph Bech, carpenter, 30 years old, was admitted into the hospital six days after the commencement of the complaint. He says that he has suffered successively from pain in the loins, the shoulders, and the right knee, this latter joint having been affected only three days; it is much increased in size, and presents evidences of fluctuation. The slightest motion causes acute pain; he cannot bear pressure on the left clavicle; pulse ranges from 96 to 100; skin constantly covered with sweat; tongue white; the other functions normal. He was ordered at first half a grain of the extract three times a day, then six, eight, and ten times in the twenty-four hours. In the course of three days the fever and perspiration completely disappeared, the pain in the knee was much diminished, and its size appeared to be rather less. The dose was increased to six and seven grains in the day, and, by the sixth day, the pain of the clavicle and knee had quite ceased, and progression was only impeded by the synovial effusion, which was not fully absorbed. The knee had, however, diminished nine lines in diameter since his admission. He continued to improve, with the exception that he had a slight tumefaction and pain in the left wrist, but which were soon removed. In the course of a fortnight, the weather proving wet, induced an attack of lumbago and some pain in the knee, for which he had vapour-baths, but without benefit, and recourse was again had to the aconite, in the dose of from twelve to eighteen grains in the day, and he was very soon relieved, so that the man himself demanded that the pills should be continued in preference to the vapour-baths, as they were far more efficacious.

The case of Joseph Bech is another example of acute articular rheumatism soon relieved by the use of the aconitum. Within two days after its administration, the pain and fever disappeared, the appetite improved, all the functions became healthy, and in less than a week that considerable effusion which had taken place into the knee-joint was diminished three-fourths, so that the patient, who previously could not move even in bed without great pain, was able to walk without any other impediment than the mechanical one offered by too much synovia. While in the preceding case abundant perspirations ap-

peared to result from the use of the aconite, in the present one it ceased during its use, and did not re-appear.

CASE VI.—*Acute Articular Rheumatism of the Wrist and Joints of the Right Hand cured by the Aconitum.*—Madame B—, 59 years old, washerwoman, was affected three years ago with sciatica, and treated successfully with blisters. Since then she has not suffered from rheumatism until lately, when all the joints of the right hand, and especially those of the thumb, became the seat of severe pain and œdematous tumefaction, accompanied with partial redness of the integument; the slightest pressure caused intense pain in all the parts affected; general health good, and no symptoms of fever present. She was ordered a grain of aconitum every two hours, which was afterwards increased to two, three, and four and a half grains every second hour.

The first and second pill produced nausea and vomiting, but those she took afterwards did not have any effect on the stomach or bowels. The other symptoms produced by the medicine were vertigo, giddiness, a great vivacity of impressions whenever the eyes were closed, and which the patient compared to the magic lantern. The local effects in diminishing the pain were very marked from the first day of its use, and at each increase in the dose, the patient experienced immediately its sedative effect. The tumefaction was not so easily removed as the pain, for when the treatment was finished, there remained very evident œdema of the dorsum manus, and around the small joints. While the patient was under my care, the disease attacked successively the wrist, elbow, and shoulder, but although these affections were more intense and to a greater extent than those of the phalanges, they yielded much more speedily, so that the joints first affected were the last cured. The sixth day after the commencement of the complaint, and the third of treatment, the thumb was free; by the tenth the joints of the medius and ring fingers were the only ones affected, and two days after the patient was able to go to her employment, having merely a little stiffness in the hand.

The case we have just read will furnish us with many interesting remarks; in the first place, we find the stomach, at first disordered by the aconite, become so accustomed to it as to be able to bear very large doses with impunity for a fortnight. Secondly, we can ascertain with more accuracy the symptoms caused by the aconite, such as numbness of the diseased arm, vertigo, disordered vision, and considerable vivacity, almost always accompanied with gay and pleasing ideas. Thirdly, the amelioration of the symptoms and the diminution of pain were not less striking in this case than in the preceding; from the first day the pain was lessened, and each time the dose was increased the suffering

was alleviated in proportion; this latter effect was so evident, that when the patient was taking three grains every two hours, she thought she was under the influence of a narcotic. Again, we have seen the large joints, namely, those of the wrist, elbow, and shoulder, more rapidly cured than those of the phalanges, although these latter were the first affected. The œdema which took place around the diseased joints followed the same course.

I might mention two or three cases more of acute articular rheumatism removed by the use of the alcoholic extract of aconitum, but I think those already given will be sufficient to point out the value of this remedy, especially when I add, that I have not met with a single case which has resisted this plan of treatment; and when I compare the results previously obtained from antiphlogistics, opiates, sudorifics, large doses of tartarised antimony, and derivatives, I do not hesitate to declare myself in favour of the alcoholic extract of aconitum.

The researches which I have made prove to me that it possesses specific powers against rheumatism affecting the joints. It does not appear to destroy the rheumatic poison, since we see joints become diseased while the patient is taking large doses of the aconite; not possessing any preservative or prophylactic properties, it appears to cure rheumatism by neutralising its morbid action wherever it tends to fix itself.

The action of aconitum on joints affected with acute rheumatism soon shows itself; the patients have often told me the pain has been lessened within an hour, but most commonly the sedative effect requires some hours to show itself; the antiphlogistic action which removes the inflammation and tumefaction, whether it be internal or external to the joint, takes place more slowly; from twelve to twenty-four hours is generally the time required to effect this improvement, nevertheless sometimes thirty-six or forty-eight pass ere it is effected. Again, in two cases we have seen the aconite act more rapidly on the larger than on the smaller joints. We have already observed that swelling of the wrist and elbow, coming on several days after those of the phalanges, were removed some time before them. The influence of the aconitum is not limited to the joints itself, but extends to the synovial membrane, and assists very much in causing absorption of those effusions which take place in almost every case of articular rheumatism. We have already seen considerable effusion into the knee-joint absorbed very rapidly during the use of the aconitum.

Stoerck, who was the first to give this medicine in rheumatism, thought it possessed sudorific properties, but the details which I have given serve to prove that this opinion is erroneous; in fact, out of eight or ten cases of acute articular rheumatism treated with the aconite, in only one instance was there in-

creased perspiration; in all the others a cure was effected without any sudorific action; and even in one case (case the 5th), the use of the extract arrested the perspiration which had existed for a fortnight.

The influence of the aconitum on the nervous system is very remarkable. As soon as the doses were increased, I have always observed a certain excitement of the encephalon, characterised by nocturnal visions, gaiety, and a great vivacity of impressions. The circulation of the brain has appeared to be so modified as to cause vertigo, giddiness, and flushing of the countenance, but in no case have I observed injurious effects from its use, although I have given it in the dose of a drachm and a half in the four and twenty hours.

The digestive functions have been but little affected by the use of this medicine. I have seen in the greater number of cases the appetite improve about the second or third day, and continue to improve while under treatment. Some have complained of foetid breath, with a whitish tongue, but the appetite was good, and these symptoms soon disappeared. Diarrhoea occurred in one case only (case 2nd), and then the medicine was omitted, but this was only after the complete removal of the rheumatic symptoms. Having passed the different functions in review, and ascertained that none are modified by the aconitum, we are obliged to conclude that this medicine is neither a derivative nor a sudorific, but is a specific against rheumatism; its action is exerted on the fibrous and tendinous parts surrounding the joints, as well as on the synovial membrane which lines it.

I have very little to say with regard to the dose or mode of administration; it did not appear to be necessary to conjoin anything with aconitum, which I have always given alone; it is nevertheless possible that its combination with opium, or some other therapeutic agent, will assist its action in certain cases. Not being guided by experience, I was obliged to begin with very small doses, such as a quarter or half a grain two or three times a day; now, however, that I have found it to be quite innocuous in very large doses, I recommend medical men to begin with half a grain every two hours, gradually rising to six or nine grains, repeated as often in the day. It is not absolutely necessary to carry it to that amount, the largest I have ever given; but if I may judge from the effects of that dose, it may be employed even in larger quantities.

Conclusions.—1st. The alcoholic extract of aconitum possesses specific powers against acute articular rheumatism.

2ndly. It very speedily removes the pain and tumefaction, and the synovial effusions in the joints affected with rheumatism.

3rdly. This medicine does not act as a derivative on the skin or intestinal canal.

4thly. When given in large doses, it stimu-

lates the encephalon, and appears to modify its circulation.

5thly. The alcoholic extract contains the active principle of the aconitum, at least, as far as regards its anti-rheumatic properties.

6thly. It may be administered in increasing doses from six grains to a drachm and a half of the alcoholic extract in the twenty-four hours.

THE

London Medical and Surgical Journal.

Saturday, January 31, 1835.

AN EXPOSURE OF DR. RYAN, OR THE MILESIAN HIPPOCRATES, IN ATTEMPTING TO INJURE THE REPUTATION OF DRs. GRAVES AND STOKES.

THE repeated attacks which Dr. Ryan has thought fit to level against us in his would-be Journal usurping the name of ours, we should pass over in pity or in silence, were he to confine his croaking to the purpose of merely annoying ourselves; but when, crawling out of his pond, he chooses to croak in the ears of our worthy correspondents and contributors, we cannot exercise towards him an equal degree of forbearance; and, although we may have greeted for a time his emulous swellings and frog-like contortions with undiminished laughter and well-deserved derision, even those writhings, when carried too far, call for a different treatment, and compel us to put forth our strength, and, wielding the cudgel of castigation, to drive the annoyance back into its muddy covert. We regret the necessity we are under to inflict such chastisement, and will perform the operation with that mercy and good temper which, although he may not merit, nevertheless becomes our own superiority.]

Our readers must be aware by this time, from the repeated explanations which have appeared in this Journal, of the facts which led to the Doctor's secession from us on the 15th August, 1834, and of his subsequently erecting the

standard of revolt, and publishing, with what success he best knows, his rival, or rather pseudo-Journal. Those facts, we trust, our readers will acknowledge, reflected no discredit on the Proprietors of this Journal, whatever they might on the retiring party. The former fulfilled to the letter their contract with the learned but discontented ex-Editor; and their liberality in this respect ought to be fully appreciated, when it is declared that, long before his voluntary resignation, such was their opinion of his abilities, that they considered him a person little calculated to give a proper tone and character to such a public Journal as this. Indeed, remonstrances having been addressed to him upon this subject, he tacitly admitted his lack of energy, by consenting to the admission of a co-Editor. Soon, however, after this, the Doctor, to the no small joy of all well-wishers to this Journal, took his leave of it, the Proprietors having to the last, with a charity by no means allied to a thirst for sordid gain, tolerated him in the performance of a duty to which he was incompetent.

On this event taking place, the Proprietors of this Journal advertised their subscribers and the public of it, in such terms as were candid and appropriate, (See No. 134, p. 119,) and certainly not calculated to raise the bile of even their ex-Editor. But how did Dr. Ryan act?—In an article inserted in a number of his *spurious* production, which with singular perversity of intellect he entitles his 134th, although every subscriber must have known it to be his *first*, he says, “that the subscribers will have some reason to complain of a fraud being practised on them, should they be induced to buy a Journal not edited by Dr. Ryan, nor supported by the eminent friends whose contributions he had been enjoy-

ing.” Now, we would ask the Doctor, where the fraud lies? In his insinuation, as conveyed in the above, that he enjoyed exclusively the support of the eminent friends attached to this Journal, and by implication that he could, and would withdraw their contributions from its pages, or in our advertisement of which he complains, and which was intended to guard the profession and the public against that spurious abortion which *did avise* under the Doctor’s auspices, destitute, as he knows well, of those contributions which had mainly given *eclat* to this Journal?

The mode in which the learned Theban fulfilled his boast of the exclusive assistance alluded to by him, gives, we opine, the most pertinent answer to our query; and for this, we refer our readers to an article on that subject in our 152nd number, p. 696. They will there find that, while the Doctor, disappointed in his *very fair* attempt to mulet us of the Lectures of Dr. Stokes, who, by the by, after well weighing the circumstances of the case, and the just claims of both parties, awarded to us the sole right to publish his lectures, and corrected them himself for that purpose—we say, while the Doctor, on account of this disappointment was at sea, his Palinurus overboard, and no compass at hand, he suddenly obtained the assistance—(God save the mark!)—of an *Unknown Friend* in his utmost need. This *rara avis*, whose love of justice, forsooth, at once gave him, as we shall presently see, second sight, and pinned him to the Doctor’s tail, the Doctor represents to have sent him (pitying, we suppose, his foundering state) an epistle garnished with high-flown compliments, and, what was still more to the Doctor’s palate, a copy, or *pretended* copy, of Dr. Stokes’s Lectures, taken “*verbatim, in short-hand.*” Now,

reader, mark, although the hand which this Fidas Achiates wrote was *short*, his sight was *long*, even so long as to enable him to descry, at the moment of taking the lecture *verbatim*, the corrections and alterations which were only made afterwards for our sole behoof by Dr. Stokes himself! These accordingly appeared in Dr. Ryan's mock Journal, as well as in our own; but, reader, mark again, *not until a week after the appearance of the lecture in ours!* The necromancy or jugglery by which this singular feat was accomplished, remains to be explained by the Doctor himself, or by his subtle, ferreting, but, somehow or other, *unknown friend*, in the bodily existence of which curious entity we are, however, most violently sceptical, seeing that, without the aid of any such *questionable shape*, nothing could be easier than for our ex-Editor and very worthy Theban to do, what in fact we believe he did, that is, to copy the lectures in question out of our Journal *seriatim*, we being always a week in advance of him. And, as a further corroborative proof that the said "Unknown" was merely a phantom begotten in the Doctor's dis-tempered caput, we may observe, that when we suspended the publication of Dr. Stokes's last lecture for a short period, in order to try its effect on our diminutive rival, *eodem puncto*, his invisible, and, no doubt, intangible, prompter vanished into thin air.

We now, for the second time, challenge Dr. Ryan to exhibit, in the garb of flesh and blood, his more than suspected co-adjutor. Circumstances make strongly against his having ever existed; and the time is now come when, if he walks this earth, he should, to save the Doctor's credit for veracity, make his appearance.

We come now to the last scene which our Theban has thought fit, in the ple-

nitude of his wisdom, to exhibit. This may be found in his latest number, and certainly a more pompous or ireful blast never sounded in the lists of journalism than that with which he sends us greeting. A more termagant scolding, even from the purlieus of Billingsgate, never assaulted human ear, than that with which he belabours Drs. Graves and Stokes, *once*, by his own confession, his "eminent friends and valuable contributors;" but now, *hèu quantum mutati ab illis!*

After an uneasy fling at the legitimacy of our Journal which provoked our risibility, and after observing that two letters have appeared in it alleged to be written by Dr. Graves and Dr. Stokes, of Dublin, he proceeds,—“In justice, however, to those gentlemen, we waited to see whether the letters would be disavowed, as we had some suspicion of their being fabricated.” *Fabricated!* Reader, observe that; *not sent to us through the medium of an unknown friend in Dublin by the Holyhead mail, but—fabricated.* Verily, the Doctor might easily have satisfied his punctilious, but considering his invisible friend, very natural suspicions on this point, by examining with his own eyes the said letters at our publisher's office. The Doctor is acquainted with the handwriting of the gentlemen in question, and the letters were ready for his or any other unbeliever's inspection.

He adds,—“We moreover found it difficult to believe that two gentlemen, supposed to be in the possession of their senses, could by any possibility have written such ineffable nonsense.” Nonsense! most sapient Doctor! Surely you are disposed to be facetious, albeit you lack the talent. Who, pray, wrote the following egregious nonsense?—“*If the part of the chest be dull on percussion when the patient is in the erect position, and clear when he lies down, it indicates*

effusion into the pleura." Stuff so paltry and ignorant, that, as Dr. Stokes observes in a passage in his last letter sent to us, which you take especial care not to quote, the veriest tyro could not read it without laughter. Who wrote this, we demand, but yourself, most sage and critical Doctor? Again,—*"A kernel got by accident into the lungs of a child; in the right lung no respiratory murmur could be heard, but percussion gave a clear sound, proving that the kernel lodged there!"* Were not these and similarly stupid passages compounded by you or your unknown and justice-loving friend, and then audaciously attributed to Dr. Stokes, as having been delivered by him in his lectures? and after this do you presume to talk of nonsense? Blush, Michael, blush; if such a mark of ingenuousness, perchance, lurk hidden beneath your skin, let it now mount into your cheeks, and tinge them even till they emulate the flame that eternally hovers on your brazen pate—but prate no more of nonsense!

The ex-Editor, however, with his usual candour—that is, when he is obliged—acknowledges at last the authenticity of the supposed fabricated letters, but at the same time begins, as he thinks, to demolish their contents; and, first, he fastens upon Dr. Graves's letter to us, dated Jan. 1, 1835, which we published, and which is probably in the memory of our readers. Dr. Graves therein most positively disclaims the lecture given in Dr. Ryan's "mock," of the 27th Dec. last, observing that "it was libellously bad, and never delivered by him." On this Dr. Ryan comments with his usual acumen; Proteus-like, twisting and turning, and by all means avoiding the straight-forward truth; but, since he needs *must* acknowledge it, he does so in the most laughable style imaginable;

and truly characteristic of himself. Here is the *morceau*:—He very coolly writes,—"So it appears that the Doctor never delivered the lecture alluded to, and has not this season discoursed on the topics therein treated;" but, as if instantly repenting of having told so much truth, he goes on, *pilis horrendis*,—"We answer, that he *did* deliver the substance of that lecture last session." Aye, aye, Michael, but last session and this session are two different things; improvement is always upon the march, and you had no business to hoodwink your slender affair of subscribers by representing that which had occurred as occurring, what had passed as being present. Talk of fraud after this!—What an arrant knave must he be who would persuade us that day is night or winter, summer! It was a wretched piece of humbug; and, however you may rave about liberality, &c., expressly calculated to render your breeches' pockets pregnant. And yet, for all this crookedness and meandering, you are prone to attack with unheard-of severity in others this very sort of blind side you possess yourself, and to elicit from an atom of falsehood a skyful of smoke. In charity we advise you, for the future, to keep a sharp look out of your tenement of glass, and not to throw stones.

Proceeding in his career, the Doctor kindles into eloquence, and, with great glee, roasts at the fire of his genius (query, scalp!) a sentence occurring at the conclusion of Dr. Graves's letter, but as the display is rather obscure, and we are not fond of foggy illustrations, we shall let it pass without further remark, and proceed to the conclusion of his diatribe against Dr. Graves. These, then, are his concluding words,—*"In our pages Dr. Graves's lectures could only serve as a 'sullen ground' for the splendid course*

of Dr. Fletcher, which needs no such foil to set it off." To this we need only answer, that what is much coveted, but out of reach, is commonly vituperated. The learned Doctor will no doubt call to mind on this occasion the fable of a certain—(don't be alarmed!)—reddish-coloured—not biped, but quadruped, eyeing unattainable grapes!

The reader must now prepare to hear another flourish of trumpets, which ushers in the Doctor's attack upon Dr. Stokes, who, equally with Dr. Graves, repudiates the patched-up and misbegotten brood of lectures our rubicund friend introduced, no doubt very adroitly and with the very best intentions, into his pseudo-pamphlet of miscellanies. Dr. Stokes, in his first letter to us, dated Dec. 31, 1834, observing on the lecture inserted in Dr. Ryan's mock of the 27th of the same month, and which Dr. Ryan put forth as one of Dr. Stokes's, and a continuation of those which had already appeared in our Journal, flatly denies its authenticity, and says,—“This lecture was never delivered by me, but is obviously composed by the Editor, with the assistance of a few unconnected notes of various lectures which were delivered long ago, and not in the Park-Street School, notes which have been taken by some singularly ignorant person.” The Doctor (Stokes) then goes on to state that the lecture, as published in Dr. Ryan's *pseudo-Medical and Surgical Journal*, is such a tissue of absurdities and errors, that it seemed strange how any editor of a medical journal could be so blind to his own interests as to publish such a farrago. Let us see what Dr. Ryan says to *this very gentle* reproof. In the first place, he denies having perpetrated the clumsy fabrication, and, egotistically enough, assures us, that, were he to attempt such

a lecture, he could, *toto cælo*, outdo Dr. Stokes. So much for empty boasting; but the question arises,—Who *did* manufacture this medley lecture? and to this question Dr. Stokes has an undoubted right to have an explicit answer from our puny rival, inasmuch as his character as an individual and his credit as a teacher might suffer by having such a lump of “ineffable nonsense”—we quote Dr. Ryan's words on another occasion—fathomed on him.

Our Theban now proceeds to descant upon his reasons for publishing the murdered lectures misrepresented as being those of Dr. Stokes, and, after cudgelling his brains for every ugly epithet brooding there, and flinging them hot and hot at Dr. Stokes, he thrusts out one cloven foot at least, if not a pair of them, and accuses Dr. Stokes of dishonourable conduct in not giving to *him* what was the due of others! making his chagrin at the disappointment an excuse for his own indelicacy and want of good manners.

Our doughty ex-Editor now lights upon what he chooses to call an exquisite piece of philology, occurring in the commencement of a second letter of Dr. Stokes's to us; but, before we mount our Theban astride on his Pegasus, it may be as well to acquaint the reader, that, farther than the commencement of the said letter, our ex-Editor and critic would not go—gall and wormwood in the shape of indignant truths met his eye throughout this letter, the initiatory sentence of which alone he dared to insert in his petty miscellany, well knowing that, had he quoted more, some damning proofs would have appeared against himself; but we refer our readers to our 153rd number for an accurate copy of it. In the meantime, our Doctor is astraddle of his philologic Pegasus, capering away,

and flourishing in the ludicrous attitude of a Milesian hedge schoolmaster; and, first, he earnestly inquires whether Dublin contains a preparatory school for young gentlemen, doubtless hoping, should such be the case, to be dubbed philological master of the same. We heartily wish him success in his new speculation, feeling well assured that his talents are better adapted to such employment than to editing his miserable pseudo.—So on, Michael, on!

But let us examine the volley with which, like Sancho Panza on Clavileno, he departs: it consists of a confession of sorrow for having inflicted wrong in holding up his quondam “eminent friend and valuable contributor, Dr. Stokes, to the contempt of the profession.” Poor man! with what complacency he seems to think that he possesses the power to do all this. No idea enters his cranium, that his endeavours in that direction have been either abortive, or have recoiled against himself. He assumes to have shown that the testimony of Dr. Stokes against his unknown-friend-begotten lectures is unworthy of credit. But how does our medical pedagogue set about the matter?—Why merely by blazing forth a string of assertions not worth the breath which utters, or the ink and paper that record them, and which, bearing in our recollection his unknown, second-sighted (perchance cloven-footed), help-mate, we cannot help most cordially disbelieving.

To the lovers of a grandiloquent though impotent finale, we beg to recommend the following splendid piece of insane raving, which we carve for their delectation, from the Doctor's concluding *brutum fulmen*:—“If the Doctor (Stokes) will now be quiet, we shall not repeat our castigation” (very lenient, that); “but if

he won't, he must not henceforth expect to be treated with gravity.” “He” (alas; poor Doctor!) “shall be hunted” (God save us!) “through successive numbers” (why not generations?) “with pungent gibes and most unsavory similes” (mark the alliteration!), “made the special object of our bitter facetiousness” (a bitter clever fellow!), “and tossed” (not in a blanket) “by tempests of laughter from one end of the kingdom to the other!!!” Of what does this awful pepper of words savour, think you, gentle reader; is it of bombast, or stark staring madness?

We turn with disgust from this picture of malevolence and vile intentions, at which, however, we know not a few who laugh most heartily, and praise the Doctor for the mouthiness of his explosion. To them, in their mirth, we now say that the poor Theban's bewildered brain has given birth to tirades more magnificent in their structure, more exquisite in their polish, than the foregoing; for instance, we find in the concluding paragraph of Dr. Stokes's last letter to us, that he (Dr. S.), possesses an epistle of Dr. Ryan's, in which he (Dr. R.) declares his determination to be “*aut Cæsar aut nullus* among journalists.” We, however, can scarcely credit that our *ci-devant* Editor has the bump of conceit so strongly developed as to induce him to believe there is any resemblance, physical or moral, between the great Roman and himself. We would bet a giant to a pigmy, that every school boy knows the mighty Cæsar had a pericranium as bald as the palm of a lady's hand, but our Doctor sports a fine, bushy, flame-coloured top-knot. Cæsar, it is said, once made an outcry for help when in danger of drowning; but who ever heard or read, that on dry land, and in perfect safety, he stood bellowing at every turn because he was

detected in a wily attempt at deception? No, no, there is no resemblance, unless it be that both the Roman hero and our Milesian Hippocrates have passed beyond a certain Rubicon. Unfortunately for the latter, *his* Rubicon is by far the less reputable of the two, since he has overleaped the limits of consistency and good breeding. If he be not Cæsar, then, who is he? The answer is plain,—he is *nullus*.

Ambition that over-vaults itself, and ill-temper, will be the Doctor's undoing; the former, by prompting him to aim at a degree of importance for which he is unqualified, and the latter, by urging him to avenge on others that failure in his attempts which is attributable to his own deficiency. Dame Nature has confined his ability, for wise purposes, within a circle which his presumption, deeming too narrow, would fain overleap; but mental elasticity is wanting, and the achievement must remain unaccomplished, at least during the term of his natural life; what sort of leap may afterwards take place, and to where, we shall not attempt to explore, but end this, our first flagellation, with a sincere wish that he may not provoke another and sounder exercise of our editorial club, the thin end of which only, we assure him, has now in mercy been applied for his behoof. If our prayers be heard, he will cull, as a certain respectable but long eared animal is wont to do, a savoury meal out of an unsavoury and prickly subject, and if his digestion be good, profit by the feast.

We would, finally, advise the Doctor to adopt in future for his motto, "*mens sana in corpore sano*," and when his wrath becomes restive and unmanageable, to recollect, that of us, the parent trunk, he is but a withered and lopped off branch, displaying, it is true, a little verdure from

the sap he still retains, but which, when it is evaporated, which it will quickly be, will leave him, we repeat it, a *withered branch*.

JOHN WILLIAMS'S LETTER IN THE
PSEUDO-JOURNAL.

The letter in Dr. Ryan's last *pseudo*, signed *John Williams*, on the "*Cholera at Portsmouth*," is equally worthy of the author and the Journal in which it appeared. We cannot express our opinion upon it in more apt phraseology than in the *elegant* language of the author. It is then, we thank him for teaching us the phrase, "*a contemptible piece of egotistical buffoonery*." We pity the simplicity and weakness of the writer. Efforts less vigorous, however, have raised men even more obscure than *himself* into notoriety. He has tried the experiment before. We recommend him to pursue the same path. It will lead him to *revenge*.—We have done with him for ever.

A LETTER, SIGNED "M. D.," ON DR. RYAN'S
BASE CONDUCT TOWARDS DR. GRAVES
AND DR. STOKES.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,—As Dr. Graves and Stokes are both of them absent some distance from this metropolis, as a medical practitioner I am anxious to say a few words in answer to the virulently abusive attack that Dr. Ryan, in his journal of the past week, has thought fit to direct against them. Anything more ungentlemanly, more entirely devoid of every particle of right and honourable feeling, the whole annals of journalism will, I think, scarcely produce, and it is with no small shame and mortification I see the members of the profession to which I belong, involved in such proceedings, and the names of such men as Dr. Graves and Dr. Stokes, eminent in their profession, and enjoying the respect, the confidence, and even the admiration of their cotemporaries, made vehicles for violent and intemperate language. It is, indeed, a subject of deep humiliation to me, as a member of the medical profession, to find one

amongst us, one, too, moving in the higher grade of the body, forgetting what is due to his own character, and the character of a physician, condescending to adopt towards any person, more especially towards his brethren, a tone and language such as that the article in question exhibits, in which disappointment and spite, malice and impotent revenge, contend for the mastery, and in which expressions are used, natural, indeed, to vulgar minds and weak intellects, but having nothing in common with the attributes of learning, or the feelings of a gentleman.

Dr. Graves and Dr. Stokes are dragged, by main force, by this man, into this controversy, where they may be bespattered with the mire of such a contention, but can gain neither honor nor profit; and I perfectly agree with Dr. Stokes, that if medical instructors are to be subject to such uncalled-for and unprovoked attacks as these, "some steps should be taken to put an end to such a grievance." Uncalled-for and unprovoked, I say, because the proximate cause of all this abuse on the part of Dr. Ryan is simply because these gentlemen choose to repudiate certain statements put by Dr. Ryan into their mouths, which, besides being untrue in point of fact, betrayed a most lamentable ignorance in point of science,—ignorance so great, that Dr. Ryan himself, in this very article, is obliged to confess, that what he published, as part of the lectures of these gentlemen, was nonsense. Yet, with this confession in his mouth, and, therefore, as we must presume, with a feeling, that what the Drs. (Graves and Stokes) did on this occasion, was unavoidable, and imperatively called for to save their reputations for medical science from the injury, Dr. Ryan did all his possible, to inflict, Dr. Ryan has the unblushing impudence—the hardened effrontery—to attempt to hold up these gentlemen to ridicule; an attempt which, but for its being utterly contemptible as coming from such a quarter, ought to be visited with the indignant reproof of every honest mind. Utterly contemptible it is, and but that one regrets to see a person, who styles himself a medical gentleman and a physician, so forgetting himself, one might be tempted to turn the ridicule on this Triton among minnows, and expose him to that unbounded laughter, that the very mention of "his pungent gibes, his bitter facetiousness," could not fail to generate. But I spare him this, and I spare him also the exposure of his mare's nest about Dr. Stokes's grammar, not indeed in mercy, but because my indignant feelings will not allow me to treat a subject like this with ridicule and levity. As a member of the medical profession, I am interested in upholding its respectability, which must suffer materially, unless conduct like that of Dr. Ryan's on this occasion shall meet with that censure from all sides which it so richly deserves, and I live in hopes that the medical profession, true to itself, and

true to that honour which I hope is dear to the majority of its professors, will mark in some becoming manner their opinion of this unworthy proceeding.

Your's obediently,
M. D.

Foreign Medicine.

SOCIÉTÉ DE MÉDECINE PRATIQUE.

Sitting, December 4th, 1834.

Miscarriage arising from a diseased state of the Placenta.

BY M. SERRURIES.

A LADY, 24 years of age, who had been married three years, was seized with violent abdominal pains, in consequence of which M. Serruries was called in. She had had no children, and though four months and a half had elapsed since the last appearance of the menstrual discharge, yet, similar delays having frequently taken place, she did not consider herself pregnant.

The size of the abdomen, and the evident contractions of the uterus, caused M. Serruries to suspect pregnancy. As he was about to make an examination, the pains greatly augmenting, a fetus of four months and its appendages were expelled from the uterus. It was a male fetus, and, from its livid colour, appeared to have been dead some days. There was a slight discharge of blood both before and after delivery. Only on the centre of the placenta were observed the granulations which indicate its insertion into the body of the uterus, occupying only the space of a five franc piece; the rest of its surface was smooth and polished, presenting at irregular intervals tubercles of various sizes; many, especially towards the centre, were in a state of suppuration; the others were about the size of filberts, presenting, both externally and internally, the character of pulmonary tubercles; their thickness was four or five lines.

The sequel of the accouchement was favourable, and the patient was able to resume her ordinary occupations on the fifth or sixth day. M. Serruries regarded the morbid state of the placenta as the cause of the miscarriage. Adhering to the uterus merely to a slight extent, it only received fluids necessary to the relative life of the mother with respect to the child, in a proportion capable of sustaining it till the period of the miscarriage, but insufficient to prolong it to the final period of utero-gestation, the placental tissue also becoming less and less permeable from the successive development of tubercles which had already occupied the greater portion of this organ. This also explains why so little blood was lost.

A lymphatic constitution was common to the lady and her husband, as also a scrofulous predisposition.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, Jan. 22, 1835:—Joseph Nickson Haslam, Market Drayton; Webster Adams, Needham Market; Thos. Tattersall Roseow, Haslington, Lancashire; William Taylor Tyson, Canterbury; Thos. Theodore Campbell, London; Walter Monkhouse, Penrith; Henry Offrell Snowden, Ramsgate; William Archer, Sudbury; Francis Carbutt Fairbank, Sheffield.

MISCELLANY OF FACTS.

At the sale still proceeding of the extraordinary library of the late Mr. Heber, among the curious tracts sold was one entitled as follows:—"D. Gordon's Pharmacopœia, or a Table and Taxe of the Prices of all usual Medicaments, simple and composed, contained in D. Gordon's Apothecarie and Chymicall Shop, with M. Robert Farquhar's high Lodging, in New Aberdeen. Imprinted by Edward Raban, Aberdene, 1625." A note says that a copy of this work, which occupies very few leaves, "at the Gordonstoun sale brought 5*l.* 7*s.* 6*d.*" It now fetched only *four shillings!*

The Duke of Northumberland has presented fifty pounds in aid of the funds for forming a museum for the Medical and Surgical School of Newcastle-on-Tyne.

Deronport and Stonehouse Dispensary.—A meeting of the governors of this institution was held on Tuesday last, Lieut.-Gen. F. Somerville, R.N., in the Chair, to take into consideration the recommendation of the Committee, "that the vacancy occasioned by Dr. Black's resignation be not filled up, and that the duties be divided amongst the present medical officers." Between twenty and thirty of the governors were present. Mr. May proposed a resolution in the words of the recommendation of the Committee, which was seconded by Mr. J. Burrows. To this Mr. R. Rundle proposed an amendment, "that the vacancy be filled up, and that no alteration be made in the distribution of the duties." Some objection being made to the latter part of the amendment, it was withdrawn; and on the question, simply that the vacancy be filled up, being put, it was carried by a majority of seven to two, neither the mover nor seconder of the original proposition voting on the occasion. Several of the governors present did not vote; and the feeling was so general that an alteration in the distribution of the duties was desirable, that it was understood the subject should be freely discussed and decided upon at the next general meeting. According to the rules of the institution, the medical department consists of two physicians, six surgeons, two apothecaries, and a dispenser, who are considered permanent. By a recent regulation the number of surgeons has been increased to eight. The annual report, dated 24th Sept. 1834, gives the number of physician's patients admitted since the last report at 354, and the number of surgeon's patients at 159, being equal to 191 to each physician, and to only 18 to each surgeon.

Sheffield Medical School.—We regret to have to announce the destruction of this school by fire. A quarrel having arisen between the porter and his wife, she ran out crying "murder," stercs instantly arose about lurking, &c., the mob attacked the school, and the work of destruction went on furiously until the most serious damage was produced.

APPOINTMENTS.

Naval.—Mr. Chrichton, assistant-surgeon to the San Josef. Mr. Charles Mayberry, surgeon to the Portsmouth Ordinary. Mr. J. L. McCall, assistant-surgeon to the Pike schooner. Mr. Robert Denmark has been appointed an assistant-surgeon, and goes to Haslar Hospital. Mr. James Selick, assistant-surgeon, from the Victory, to Haslar Hospital. Mr. J. H. Martin, assistant-surgeon to the Curlew. Mr. W. Rey, assistant-surgeon to the Victory. Mr. W. Dunbar, assistant-surgeon

to the Speedy. Mr. J. Dunne, acting-surgeon of the Larne. Mr. John Hoste Martin, assistant-surgeon of the Larne. Messrs. C. L. Fuller, J. Gordon, and J. Robertson have been appointed surgeons.

Military.—Assistant-Surgeon Turner, of the Ordnance Medical Department, to the station at Island Bridge, near Dublin.

General.—Edw. Duke Moore, Esq., apothecary to the Queen's Household, in the place of Magnus W. Andrews, Esq., deceased. Mr. R. D. J. Evans, surgeon of the Hertford General Infirmary, in the place of Mr. T. R. Colbeck, resigned. Mr. Francis Sharpe, surgeon to the Leeds Lying In Hospital.

DEATHS.

Dr. G. Roberts, of Quebec, formerly of Belturbet, Ireland. Mr. James Lyde, surgeon, Glasgow. Mr. William Cooke, of Wolverhampton, surgeon. Mr. C. Bingham, of Lichfield, surgeon. Mr. Jas. Farnish, surgeon, of Sheffield, late of Cambridge. Dr. Thos. Naughton, of Rostellan, County Meath, aged 91. Mr. John Scudamore Lechmere Tateshall, surgeon, of Hereford. Dr. W. B. Millan, of Dundee. Mr. J. M. Bowman, surgeon and Mayor of Ripon. Mr. Thos. Janes, of Rockampton Lodge, Gloucestershire, surgeon. Mr. James Moffatt, of Hexham, surgeon.

WEEKLY BILL OF MORTALITY.

London, Tuesday, January 27th, 1835.

Abscess	3	Inflammation	67
Age and Debility	75	Inflammation of the	2
Apoplexy	14	Bowels & Stomach	2
Asthma	48	Inflammation of the	
Cancer	2	Brain	5
Childbirth	10	Inflammation of the	
Consumption	85	Lungs and Pleura	33
Convulsions	44	Jaundice	17
Croup	3	Liver, Diseased	1
Dentition, or Teeth-		Measles	23
ing	10	Mortification	3
Dropsy	22	Paralysis	2
Dropsy on the Brain	17	Small Pox	16
Dropsy on the Chest	2	Sore Throat & Quinsey	1
Erysipelas	1	Spasms	1
Fever	7	Thrush	3
Fever, Scarlet	14	Unknown Causes	14
Gout	2		
Heart, Diseased	1		
Hooping-Cough	16	Stillborn	31

Males 324 Females 276 Total 600
Increase in Burials reported this week, 211

BOOKS RECEIVED.

A Treatise on Rickets; with a new Theory of Ossification, and a plate and description of an improved reclining couch for the distorted. By J. HUME WEATHERHEAD, M.D., Lecturer on Materia Medica and Therapeutics at the Westminster School of Medicine, &c. pp. 123. Renshaw: 1835.

QUAIN'S Anatomical Plates. Fasciculi 21 and 22. Plates 41, 42, 43, and 44. The plates present in a very distinct manner the muscles of the back and neck, the most difficult parts of anatomical study. Students would be well repaid by the labour of examining them. They are correct.

Observations on the Cause and Treatment of Ulcerous Diseases of the Leg. By J. C. SHENDER, M.R.C.S.L. pp. 210. Longman: 1835.

CORRESPONDENTS.

We are much obliged to our correspondent T. H. for sending us the particulars of the paper read by Sir H. Hallford before the College of Physicians on Monday last. We have not room for our comments this week; in our next they shall appear.

The valuable Clinical Lectures of Dr. Roots will be commenced in our next.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

LECTURES

INTRODUCTORY TO THE COURSE OF THE
INSTITUTES OF MEDICINE,

DELIVERED BY

ROBERT J. GRAVES, M.D.,

King's Professor, Dublin.

LECTURE IX.

GENTLEMEN,—There can be no doubt that certain periodic quantities of time hold a very intimate connexion with the conditions of the human system, both in health and disease. Many diseases, particularly those of a febrile character, have been long remarked for the tendency they manifest to terminate by what is called a crisis on certain days, and many of the healthy functions of the system exhibit a more or less distinct periodicity, of which the appearance of the menses in females is perhaps one of the most remarkable instances. Accurate observation has established that none of the functions of the body is performed in a perfectly steady or equable manner. They are subject even to a diurnal periodicity; thus the pulse, and the consumption of oxygen by respiration, exhibit slight but notable variations, which have periods of twelve hours, and it is highly probable that the same law holds with regard to animal heat. The consumption of oxygen, the development of animal heat, and the digestive activity are all greater in winter and spring than in summer and autumn. Of all the periodic numbers, which have been noted by the professors of medicine in ancient or modern times, the number seven in point of days or years seems to be most intimately connected with the revolutions of the human system. At seven years the milk teeth are shed and a new and permanent set make their appearance; at fourteen those important changes in the physical and moral character, which constitute puberty, begin to manifest themselves; and at twenty-one the individual is supposed to have arrived at the years of discretion, or, in the common phrase, is said to be of age. From this up to the ninth septen-

nial period, the connexion of the number seven with the changes in our systems becomes less apparent, but I have no doubt but that a more accurate observation will show that influential modifications of the system, whether physical or moral, may be observed at each septennial period during this interval. Thus at eight-and-twenty a man is supposed to arrive at the full perfection of intellectual and bodily powers, at five-and-thirty the characters of manhood, mature, reflective, and provident of the future, become distinctly marked, and although, during the succeeding periods, the physical and moral revolutions are faintly shadowed out, and life appears like a stream, to the eye of a remote spectator, descending in a noiseless and unchecked current, still a closer inspection will show that its course is modified by certain appreciable changes, and that these changes are connected with climacteric periodicity. In this country females generally begin to menstruate about fourteen, and at forty-two this function is either interrupted or stops, and they cease to bear children. Among males, sixty-three has been long noticed as a period at which the constitution is very apt to break down, and hence it has been termed the grand climacteric. If you cast your eyes round the circle of your friends and acquaintances, you will find many persons, who have arrived at this age, beginning to manifest indications of declining health, losing flesh, and become weak, nervous, and dyspeptic without any obvious cause. This constitutional struggle goes on for months, the individual loses his strength and spirits, he becomes pale, emaciated, and valetudinary, and his friends remark that he is breaking up very fast. After a certain length of time matters come to a crisis, the constitutional debility and uneasy feelings terminate, either in some distinct and decided form of disease, or an unexpected and unaccountable change for the better occurs; the patient begins to recover his appetite and strength, good digestion, sound sleep, and a flow of spirits gradually return, and he is congratulated by his acquaintances as one who has dipt in the fabled fountains of youth and got a new lease of existence. He now goes on favourably until he arrives at that period,

which is considered to be the average duration of long lived persons, three score and ten.

Such are the changes which occur at the various septennial periods. They are more prominent at the commencement and termination than during the middle, but if we were in possession of more accurate knowledge on this subject, it is very probable that we should find that none of these periods passes without some form of constitutional disturbance. In youth the processes, which mark the progress of moral and physical development, give to these changes a more palpable character, and in old age, when the powers of the constitution are weakened, periodicity also exhibits itself in a more determinate way. Sir H. Hallford has written a very interesting memoir on this subject, and certainly his observations appear to be borne out by facts. You will frequently have occasion to notice the breaking up of the system, which occurs about the grand climacteric, and you will see some persons, after wrestling with it for a considerable time, sink under some well marked disease, while others will rally, regain their wonted vigour, and go about for years in the full enjoyment of health. I may mention, in addition to what I have said respecting the number seven, that it seems to hold a very extensive relation to the critical termination of fevers. We have, as almost every one knows, seven, fourteen, and twenty-one day fevers; and it has been long remarked, that critical terminations are very commonly observed to occur on the seventh day, or on some day the number of which is formed by one of the multiples of seven.

The decline of life is accompanied not only by a failing of the physical energies, but also by a decay of the intellectual powers; the brain shrinks, and its specific gravity becomes greater than in an adult of similar stature; its functions are now carried on with diminished intensity, and the intellectual lights become proportionately dimmed; memory fails, imagination is no longer vivid and exursive, the pleasures of sense lose their attraction, and the objects of human pursuit appear hollow and unsubstantial. Amidst this wreck of intellect, feeling, and health, the old man would be in a truly melancholy and cheerless state, had not nature provided against his total desolation in the survival of some important affections, the tendency of which is to reconcile him to himself and his species. One of these is the love of life, a selfish principle no doubt, but given to man for the wise purpose of counteracting that propensity to self-destruction, which irksomeness of life is apt to generate; the other is the love of offspring, which prevents the unnatural transfer of property, and connects the old with the young generation. The wisdom of making the affections of the aged take new root in their grand-children is sufficiently obvious; by this provision the extremes of life are brought into contact, and the leaf, though sear and withering, covers and protects for a time the bud yet too tender to bear exposure.

Many interesting considerations present themselves connected with the duration of human life. Three score and ten has been long reputed a good old age, being, as an old author remarks, a good medium, by which the world is neither overstocked nor kept too thin. It is not merely a selfish motive which makes us pursue these enquiries, for be assured that as we succeed in improving the rules of life, and as a knowledge of those agents, which tend to lengthen or shorten its duration, becomes more generally diffused, mankind will profit by the investigation, and the average duration of human existence will be extended. Much benefit has been already derived from such enquiries in all civilised countries. I do not fear contradiction when I assert, that the prolongation of human life is a decided advantage, because, in proportion as the judgment of the old is brought to act on the passions of the young, will the wisdom of nations accumulate, and the solidity of individual character be increased. In making an estimate of the physical qualities of the human race, longevity should form one of the ingredients, and it is a subject which deserves the notice of the politician and the moralist as well as the physiological inquirer. That nation, in which life endures longest, will, *cæteris paribus*, exhibit the greatest solidity of intellect. Where the duration of life is short there is more or less probability that the decisions of the state will be acted on by the passions and impulses of the young. There is a great difference between the average duration of human life in England, and in Italy, and the south of Europe, and this is perhaps a circumstance which, as long as it remains relatively so great, must tend to make the English a wiser and more solid people, and must render their laws and institutions more secure than if generation were to succeed generation with great rapidity.

With respect to the greatest duration of human life in later times, I believe the oldest well authenticated *modern* on record is Thomas Parre, who attained the extraordinary age of 152. It is said that "Old Jenkins" lived to the age of 169, but this has not been sufficiently ascertained. The celebrated Drakenberg of Norway, who died at the age of 147, remained a bachelor until his 111th year, when he came to the resolution of taking a wife, and was married with great pomp, his nuptials being attended by the whole Danish court. He continued to enjoy the blessings of the matrimonial state for several years, and what is rather uncommon survived his wife. If you turn to the article Longevity, in any of the Cyclopædias, you will find an account of the most remarkable instances of long lived persons, it is, therefore, unnecessary for me to detain you by accumulating examples. During the course of my practice, or in the circle of my acquaintance, I do not remember to have seen in this country any person above 105 or 106, but I have very recently conversed with

a very intelligent lady about that age. During the past week, as you may have seen in the newspapers, a person has died at the age of 114, and in different parts of Ireland individuals have been known to reach the age of 120.

It is a common opinion, not only at present, but has been some thousand years ago, that the human race is in a state of degeneration, that man from being a giant has dwindled into a dwarf, and that his bodily vigour has sustained a proportionate diminution. You will find this opinion frequently expressed in the writings of Homer, in which Nestor so often deploras that the colossal stature and enormous strength of the heroes he had known in youthful days can be no longer found. The same opinion was maintained during the historical era, and still exists to a very great extent. We hear men constantly complaining not only of the moral, but also of the physical, degeneracy of mankind, and the present race are said to be but pigmy types of their tall and athletic ancestors. I believe most of these assertions have but little foundation in truth, and that, in point of strength and stature, mankind has not diminished so much as the admirers of antiquity suppose, while in the matter of longevity they have considerably surpassed their predecessors. From historical records, and from an examination of the lists published by the Roman censors, in which the number of the citizens, male and female, with their respective ages, was given, it appears that the average duration of life among the Romans, when compared with the English of the present day, is as thirty to forty-five. Thus out of thirty Romans, as many would die in a given period as out of forty-five Englishmen. This is a great difference in mortality, and here, at least, we have proof that men were not so long lived eighteen hundred years ago as they are at present. Moreover, it has been established that the term of human life has not only increased since the time of the Romans, but that it has received a considerable addition even within the last hundred years. So great has been the increase in the mean duration of life, that the tables which were made sixty or seventy years ago, and which served as the basis of their calculations for insurance companies, have been found to have underrated the duration of life very considerably. The consequence of this error, however, has turned out very favourably to themselves, for as the rates of insurance were calculated and charged according to their limited estimate of the duration of life, their profits during the last fifty years have been enormous, owing to this cause, that out of a given number of persons taken seventy years ago the average number of deaths would considerably exceed what it would be at present. We have, therefore, full and satisfactory proofs that life has increased in a very remarkable manner throughout Great Britain within the

last century, not only among the rural population, but also among the inhabitants of towns and villages. In London, the duration of life is nearly twenty-five per cent. greater than it was in 1734. Now to what are we to attribute (and this is a most important question) this remarkable and satisfactory increase in the duration of human life? Partly (and I mention it with feelings of pleasure and pride) to the various important and valuable improvements in medicine and surgery. Many diseases at present treated with success, were at that period either managed on false and empirical principles, or they were looked upon as incurable and fatal. I need not recur to the time when fistula in ano and many other surgical diseases were deemed incurable, or refer to the long list of fatal complaints among lying-in women and infants, to the state of our science with respect to pulmonary and febrile diseases, or point to the improved treatment of syphilis and the blessings of vaccination. The progress of medicine, based on sounder and better principles, has been intimately connected with the diminution of mortality in modern times. Any one of these improvements in practical medicine would be sufficient to produce a diminution such as would be sensibly felt in the lists of mortality.

It would appear almost incredible what vast numbers of children were formerly lost, particularly in the ill-conducted institutions of former years. Among these, the Dublin Foundling Hospital is worthy of being recorded, to show the horrible consequences which result from gross mismanagement. I have read with feelings of sorrow and disgust the minutes published by a parliamentary committee on the state of this institution. It appears that during the space of twenty-one years ending in 1796, ten thousand two hundred and seventy-two sick children were sent to the infirmary; out of these forty-five recovered! Dr. Bisset Hawkins, who makes this statement, does not mention the cause of this frightful mortality, which earned for the physician the soubriquet of Herod the Great. The true reason of the mortality was, that to save trouble and expence these unfortunate infants were not provided with nurses, and that almost all of them were crowded into the venereal ward, where, by being spoonfed, they took the infection from each other. There was no nurse to give them the breast, and when they cried and became troublesome, they were dosed with laudanum to keep them still. And the laudanum did succeed in keeping them still, for many of them never awoke.

I would not cite this foul blot on medical practice, had it not been unparalleled in the history of the healing art; and did it not furnish a striking hint to the managers of public institutions, showing to what an appalling extent abuses may exist in such establishments. Indeed I will venture to assert, that the institution of foundling hospitals has

been on the whole productive of more harm than good. I pass over the circumstance of the child being deprived of the advantages of being suckled and attended by a mother, or a nurse interested in its welfare, and shall only observe, that in every institution of the kind, where helpless infants are congregated in great numbers, the greatest attention and care cannot prevent a mortality far beyond the usual average under different circumstances, and hence it is that foundling hospitals are now almost entirely given up, not from any motive of paltry economy, but from the necessary tendency they have to occasion a vast destruction of human life.

In England the rate of annual mortality has considerably diminished within the last seventy or eighty years. In 1780 it was calculated that one person out of forty died in the year; in 1790 only one in forty-five died, and, in 1821, the mortality became so low as one in fifty-eight. Here we have a cause capable of producing an amazing difference in the state of the population. With respect to the rest of the European states, the following is a comparative estimate of the rate of mortality:—one in twenty-eight in the Roman and Venetian states; one in thirty in Italy in general; one in thirty in Greece and Turkey; one in thirty-nine in the Netherlands, France, and Prussia; one in forty in Switzerland, Austria, Spain, and Portugal; one in forty-four in European Russia and Poland; one in forty-five in Germany, Denmark, and Sweden; one in forty-eight in Norway; one in fifty-three in Ireland; one in fifty-eight in England; one in fifty-nine in Scotland and Iceland; so that you perceive the duration of life in this country is very great when compared with others, and that whatever foreigners may say about our dull and foggy climate, it is a fact that we live much longer than those who dwell in the sunny climes of southern Europe. The boasted climate of Italy, with its soft vernal breezes and cloudless skies, gives a mortality of one in thirty, whereas among our Irish bogs it is only one in fifty-three, while in the Roman and Venetian states, more than twice as many out of a given number die as among the bleak districts of the Scotch Highlands. It is then perfectly well ascertained that in England, Ireland, and Scotland, the mortality is much lower than in the poetic "lands of the sun," Italy and Greece. But we are not to attribute the superiority of any country in this respect, either to its soil or climate, for there is no doubt that if civilisation, the blessings of a free government, and the enjoyment of the comforts of life were as extensively diffused among the Greeks and Italians, as they are among the inhabitants of the British Islands, the rate of longevity in these countries would be remarkably increased.

I have already alluded to the beneficial influence on human life which resulted from the numerous and important discoveries in medi-

cal science. The improved treatment of venereal, of puerperal, and infantile complaints, of fevers, pulmonary affections, and of surgical diseases too numerous to mention; all these have tended materially to prolong the duration of human life, but none of them can be put in competition with the truly great and invaluable discovery of Jenner. In order to give you some idea of the vast quantity of human lives saved by the introduction of vaccination, I shall call your attention to a brief statement of some facts bearing on this interesting question. In 1790, one out of every eight children born died of the small-pox; in 1820, only one out of 2066; that is, out of this number there are now saved about two hundred and fifty, who forty years ago would have died of small-pox. In 1779, the small-pox destroyed in Sweden 15,000 persons; in 1784, 12,000; in 1800, 13,000; in 1822, eleven.

It is an interesting but melancholy task to turn back for a moment to the history of past ages, and to pass in review the different causes whose fearful operation has at various times made whole countries desolate, and swept almost entire generations from the surface of the earth. As time will not permit me to enter upon the details connected with this subject, I must refer you to those historians who describe the state of England for two centuries after the departure of the Romans, as well as to the accounts given by contemporary authors of the depopulation by the sword, plagues, and hunger, which threatened to exterminate whole nations during those dark ages which followed the fall of the Roman Cæsars.

I have told you, gentlemen, that the average duration of human life has proceeded, *pari passu*, with civilisation and an improved state of living, and that men are generally much longer lived at present than they were during the middle ages. Yet some persons, more poetical than discriminating, believe that poverty and barbarism are the promoters of health, and that longevity is only to be found in the hut of the savage. The savage, it is true, displays great vigour and activity of body, and an astonishing endurance of hunger, fatigue, and pain; but it has been fully established, that the mean duration of life among them is far below that of civilised man; whole tribes of them are frequently swept off by epidemics, and the mortality among their children is enormous. Poets have taken a particular pleasure in singing the praises of him who derives food, clothing, and health, from the chase, who quenches his thirst in the cool spring, and makes his bed beneath the canopy of heaven, and they have given to poverty the reward of health, peace, and longevity; but unfortunately statistical inquiries have, by the dull reality of facts, destroyed all these beautiful illusions, and have stripped poverty of all its charms, by proving that the liability to

disease is increased and the duration of life diminished in proportion to the privations man is doomed to undergo. If you take thirty or forty persons in the middle class of life, and compare them with the poor of the Liberty in Dublin, or St. Giles's in London, you will find that the annual mortality among the latter is much greater, and that the term of life diminishes in proportion to the extent of their poverty.

It appears from a very interesting Essay, by M. Villermé, on the comparative mortality among the indigent and those in easy circumstances, both in the capital and in the departments of France, that there is a striking and remarkable difference. Throughout the departments, he states, the mortality is one in fifty among those who are in good circumstances, while among the poor it is one in twenty-four.

A similar difference, he states, exists between the mortality of the poorer and more opulent parishes of Paris. The density of the population, narrowness of the streets, and other local circumstances, generally supposed to be very influential on the public health, were proved to be very unimportant when compared with the single element, the general state of the people as to the possession or want of the comforts of life.

On an examination and classification of the deaths which take place annually in the Paris hospitals, it appeared, likewise, that the mortality is much less considerable among the tradesmen and artisans who generally earn a tolerable competence, than among those of the lower order who have no certain and constant means of support, and who are frequently exposed to a degree of penury which, while it tends, by weakening, to render the body more susceptible of disease, and less capable of resisting its attacks, serves likewise to undermine the moral energies, and give rise to mental sufferings which still further shake and debilitate the constitution. This latter fact proves that the resources of medicine are comparatively inefficacious when employed to cure disease complicated with the effects of previous poverty; and, on the whole, the evidence before us is strongly in favour of the conclusion, that the general diminution of mortality in France and England is chiefly owing to the ameliorated condition of the great mass of the people, and a more general diffusion of ease and comfort. Would that the same remarks were applicable to the country or to the city we inhabit!

Statistical documents are wanting to enable us to compare the mortality of Ireland or of Dublin with that of England or of London*, but I have no doubt the difference must be

striking. I draw this conclusion from personal observation, and from a comparison between the modern medical annals of the two countries. Whoever has witnessed the number of those applicants who crowd the doors of our medical Institutions, or has seen how inadequate the Dublin hospitals are for the accommodation of the sick poor,—whoever has followed the progress of those epidemics which almost annually devastate this city,—must acknowledge the extraordinary prevalence of disease in our metropolis. Need I adduce proofs of the squalid poverty and wretchedness of its victims? Shall I draw a sketch of what we every day see? The colours usually employed to depict human misery are too weak and feeble for the task; nor will the legislative or statistical inquirer, who endeavours to discover the true causes of all this wretchedness, derive consolation from the too-convincing proofs which everywhere abound—that ignorance, intemperance, and vice with all its varied features of deformity, have powerfully aided in producing this excess of human misery and degradation.

The frequent epidemic fevers which spread their ravages throughout the provinces of Ireland prove that its peasantry enjoy scarcely more immunity from disease than the poorer inhabitants of the towns. One fact is well worthy of notice;—these epidemics are usually preceded and accompanied by circumstances tending to aggravate the usual state of misery and want. Thus, when fever devastated a large portion of Ireland in 1822, I had an opportunity of proving that the distressed invariably became also the diseased districts—the invasion of typhus was always preceded by the march of dearth—the steps of pestilence but deepened the foot-marks of famine!

To explain the origin of that poverty which excites the sympathy of even strangers,—to account for a scarcity of provisions in a country whose ports are crowded with shipping employed in carrying away corn and cattle,—to investigate the sources of that pollution which has demoralised a people naturally open, frank, and generous, and has rendered excessive intemperance and improvidence the most venial parts of the national character,—belongs not to statistical medicine; the duty of the physician extends not to these subjects; his employment is to alleviate the effects without discussing the causes of misery and vice; but he owes it to society—he owes it to his country,—to proclaim aloud the existence of the evil.

* I have, however, given one in fifty-three as the annual mortality of Ireland, on the authority of Hawkins. How data were obtained to make this calculation is more than I can guess.

LECTURES

ON

MIDWIFERY & THE DISEASES
OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XVII.

*Mole Pregnancy—Signs of the Child's
Death—Classification of Labour.*

GENTLEMEN,—There is another singular deviation from the natural course of gestation, called *mole pregnancy*. From the very beginning of its development the ovum may be either so deficiently organised, or it may degenerate so completely, that its nucleus, the embryo, may either never have existed, or have been obliterated shortly after its formation. "Should the embryo die (suppose the first or second month) some days before the ovum is discharged, it will sometimes be entirely dissolved, so that when the secundines are delivered there is nothing else to be seen; in the first month the embryo is so small and tender that this dissolution will be performed in twelve hours, in the second month two, three, or four days will suffice for this purpose*." If the interval, between the death of the embryo and the expulsion of the membranes be at all considerable, they become remarkably altered in point of structure; as the embryo no longer exists, for the growth of which the venous radicles of the chorion had been so actively employed in absorbing nutritious matter, the supply of nourishment seems now to be directed to the chorion itself, which takes on a fleshy structure, and grows with considerable rapidity, being nourished by the vessels above-mentioned; such an ovum, which consists merely of the membranes altered in structure, is termed *mola*, *mole*, *false birth*, &c.

These morbid degenerations of the ovum have been distinguished according to the various appearances which they present; sometimes the ovum forms a cyst, containing water, blood, or air, or its parietes are converted into a spongy, fleshy, or tendinous mass, hence we have, among authors, the *mola aquosa*, *cruenta*, and *ventosa*, the *mola fungosa*, *carnosa*, and *tendinea*; sometimes we meet with a considerable chalky or calcareous deposit, *mola calcarea*, and in cases where moles have been retained a considerable time in the uterus, a more or less complete ossification of their substance has taken place, the *mola ossea*; these however are but rarely met with. Another species of mole is the *mola vesicularis*, or *hydatica*, which consists

of a mass of vesicles like hydatids, and which seem to be the absorbent extremities of the vessels of the chorion distended with serous fluid; this species of degeneration of the ovum frequently attains a very considerable size, equalling even that of a full grown foetus, whereas moles of the other species seldom attain a size larger than that of a two, three, or perhaps four months' ovum, and it rarely happens that the membranes of a three months' ovum have a degeneration of this sort.

The most common species of mole is the *mola fibrosa*, which is nothing more than a coagulum of blood, retained in the uterus after delivery, or severe floodings at any period of life, and squeezed by the pressure of the uterus into a compact form. In these cases the serum and red particles escape, leaving the fibrinous portion behind. This species of mole, although it may assume the appearance of pregnancy, is generally expelled spontaneously, and is seldom attended by dangerous results. In the preparation, which I here show you, the mass is simply a fibrinous cast of the uterine cavity. Among those which are upon the table you will observe that in many the embryo is disproportionately small, the short umbilical cord very thick, the parietes of the ovum thick, hard, fleshy, and lobulated; upon closer examination you will find that the decidua, which is of a natural structure, covers the external surface of the ovum, and that the amnion, on its internal surface, is likewise unchanged, the degeneration of structure is evidently confined to the chorion and placental half of the umbilical cord. In those preparations, where a section has been made, the chorion seems to consist of a fleshy fibrous structure, the arrangement of the fibres marking the lobuli which I alluded to; whether these be the remains of what would have been placental cotyledons or not is difficult to say. The symptoms denoting the existence of a mole are very uncertain, nor is any thing unusual to be detected for the first six or eight weeks; after this period the size of the abdomen is observed to increase with unusual rapidity, especially in the case of hydatic moles; this is accompanied with pain and frequently with hæmorrhages, which occur from time to time, in proportion to the degree of connexion between the mole and uterus, these weaken the patient considerably, inducing leucorrhœal discharge, œdema of the feet, with general indisposition and debility.

The expulsion of the mole itself generally clears up all doubts as to the nature of the case. Where it is of the hydatic species, the discharge of a few single cysts will frequently inform us of the nature of the complaint before the whole mass is expelled. A small quantity of limpid serous fluid suddenly discharged from the vagina without any previous warning, and ceasing as suddenly, is a symptom which will justify the suspicion of this species of mole being present. I need hardly say that this is produced by the rupture of some of the cysts,

* Smellie.

These cysts are supposed to be the bulbous absorbing extremities of the veins of the chorion distended with a serous fluid; but Bremser asserts that he has occasionally met with real hydatids among them.

The treatment of the patient during the expulsion of the mole will in nowise differ from that of abortion, and the same rules for practice in case of flooding, &c., in the one case will equally hold good in the other. The after-treatment of the patient will consist in a mild course of tonics, change of air, more especially to the sea-side, with the use of the warm or cold salt-water bath, shower-bath, &c., &c.

I now, gentlemen, come to the consideration of a subject of which I can truly say, that so far from approaching it with greater confidence the oftener I have to lecture upon it, the more experience I gain, the less and less satisfied do I feel with the knowledge which I have to impart to you upon it. *The signs of the child's death* before birth form a subject of diagnosis not less important than difficult, and must still remain imperfect so long as we are unable to remove the difficulties which surround it. "If there be any subject (says the admirable Mauriceau) connected with midwifery which demands the utmost care and attention of the accoucheur, it is the being able to determine whether the fœtus in utero be alive or not."

In cases where, from disproportion between the head and pelvis, from unusual undilatibility of the os uteri, tumours, or from any other cause which renders the passage of the head unusually difficult or dangerous for the mother, even with the aid of the forceps, it is of the utmost importance to be able to decide with certainty whether the child be still living, because if not, the perforation of the head may be performed, and the mother released from her danger and suffering.

On the Continent, especially in Germany, the Cæsarean operation is frequently performed in cases, not as in this country, *only* where the child cannot anyhow be born, but also where being known to be alive, it might, by diminishing the bulk of the head, be made to pass without danger to the mother. Here it becomes of immense importance to be able to decide with certainty whether it be still living, because, in cases under *these* circumstances threatening Cæsarean operation, if we are able to ascertain that the child is dead, the perforation may be performed, and the mother spared the danger of this terrible operation.

By enumerating the symptoms which have been considered to denote the death of the child, I should do but little in rendering this subject intelligible to you, for they are extremely equivocal and uncertain, and have frequently occurred when the result of the labour has not only shown the child to be alive, but healthy and vigorous.

To render this subject more intelligible to you, I shall divide the symptoms of the child's

death into those which occur *before*, and those which are chiefly observed *during*, labour. Of those which occur before labour I know but of one symptom on which we can rely with any degree of certainty—I mean the sensation of a weight or foreign body lying loosely in the abdomen. Whenever the patient rises from her chair, whenever she turns in bed, stoops, or in any way changes her position, she feels the rolling about of this weight. A woman may even dance when pregnant, and she feels no more of a living fœtus than she does of her own liver or spleen, but the moment the fœtus is dead it is quite different, the fœtus no longer obeys the laws of organic life, but those of gravity. I have, however, met with this symptom two or three times where the result of the labour has proved the child to be alive, and cannot exactly account for it. Without this symptom it is extremely difficult to determine whether the child be alive or not. A woman may affirm that she felt the motions of the child at the beginning of her labour, and yet she will bring forth a fœtus, which, from the degree of putridity, must evidently have been dead several days; another, just before her labour, feel very uneasy at not having felt the motions of the child for the last day or two; she is sure that it is dead, for she feels quite differently to what she did in her former pregnancies, and nothing can convince her to the contrary, yet, with all this, she is delivered of a healthy and vigorous child.

Among the symptoms which you will find usually enumerated as signs of the child's death are the following: The patient is seized with a sudden shivering of more or less duration, the bowels are disordered, she becomes pale, sallow, and of a dark leaden colour under the eyes; the breasts are flaccid; she loses her spirits and appetite; her breath is frequently foetid; and she complains of considerable languor and debility, and occasionally has a foetid slimy discharge from the vagina. With all this she feels no motion of the child, but has a strange sensation of cold at the lower part of the abdomen, which is diminished in size and remarkably flaccid. From these symptoms, taken altogether, we might conclude, with tolerable certainty, that the child has ceased to live; but there is not one of them which, of itself, can be considered as diagnostic; the stethoscope, also, does not afford us that assistance which has been supposed; the *souffle placentaire*, or sound of the uterine circulation, does not prove that the child is alive; the absence of the fetal pulsations is no evidence of its death: this you will understand from what I told you in a former lecture when speaking of the signs of pregnancy.

During labour there are many symptoms which, even when *separately* taken, will enable us to decide with considerable certainty that the child is dead.

In presentations of the head, a considerable swelling of the scalp is produced by the pressure of the os uteri and external passages, but

if the child be dead, there is no cranial swelling, and the scalp is felt flaccid and loose. This symptom requires, however, considerable qualification; where the head is small, the pelvis roomy, and the soft passages well dilated, it will present no swelling, and yet the child will be alive; on the other hand, if the labour be long and severe, a considerable swelling may have formed upon the head, and yet the child may have died some hours before birth. If the child has been dead some days, the scalp will not only be felt loose upon the cranial bones, but it will even become crepitous, from a degree of emphysema, the result of putrefaction. The bones of the head will frequently be quite loose under the scalp, producing a sensation to the finger, as Johnson very aptly terms it, of a bag of shells.

If the arm has fallen down into the vagina, as in cases of arm presentation, it swells very considerably, and becomes of a purple colour, in a living child, from the pressure of the os uteri and external passage; whereas if the child be dead, no swelling will be produced, and the epidermis will begin to separate. If the cord be prolapsed, the pulsation will, of course, immediately tell us that the child lives, whereas, if it be felt flaccid and empty, without pulsation, we may be as certain of the contrary. In presentations of the nates, the sphincter ani, in a living child, is always found contracted, and will distinctly contract upon the finger, and, in face presentations, the tongue will frequently be felt to move, but if the child be not alive, the sphincter ani will be found relaxed, flaccid, and insensible to the stimulus of the finger, and the tongue motionless and flabby. Besides these symptoms, the membranes generally rupture early, with scarcely any pain, discharging a highly foetid liquor amnii, more or less mixed with meconium. But you must be cautious, gentlemen, in not placing too much dependence upon the two last symptoms, for I have known cases where the stench has been so insupportable as to drive every body from the bed-side of the patient, where the liquor was of a dark brownish colour, thick, and slimy, and yet the child was born alive, and perfectly healthy; nor is the presence of the meconium a sure sign, because it frequently occurs in cases where the nates present. Nevertheless, in any case, *except* presentation of the nates or inferior extremities, the presence of the meconium will authorise suspicion of the child's death.

So much, gentlemen, for the symptoms which denote the death of the child; it will now be necessary for me to offer you a few observations on the *classification of labours*, and the *duration of utero-gestation*. I shall thus be able to commence the subject of premature expulsion of the foetus in my next lecture, and then proceed to the consideration of labour itself. It would be not less uninteresting than useless were I to enumerate the many different arrangements which authors have made use of in the classification of labours; for there are

few subjects in which their attempts have met with so little success.

Hippocrates divided labour into *natural* and *unnatural*, all those being natural in which the head presented; but, as I shall shortly prove to you, a presentation of the nates or inferior extremities is just as natural, nor is it scarcely possible to say what *is* and what *is not* a natural labour. Rœderer, Professor of Anatomy and Midwifery at Gottingen, has divided them into *natural* and *artificial*; this last division is subdivided into *manual* and *instrumental*, and these again into *forceps*, *lever*, and *perforation cases*, &c.; but this is far from being practical, we should never think of classing a bad compound fracture of the leg or thigh with a case of white swelling, merely because they happened to be amputation cases.

Modern accoucheurs have divided labours into *regular* and *irregular*, the regular consisting of all labours which may be completed by the natural means without danger; but the variety of labours is infinite, no two labours are precisely alike, and that species of labour which in one case may prove easy, in another may prove difficult or even dangerous. Dr. Smellie divided labours into three classes, viz. *natural*, *laborious*, and *preternatural*. Dr. Denman, again, has made four classes, viz. *natural*, *difficult*, *preternatural*, and *anomalous*. But this arrangement is liable to many objections; a labour may be very difficult, and yet perfectly natural.

The most comprehensive and simple division which I know of is into *eutocea* and *dystoceæ*, the one being healthy, natural, or favourable labour, the other faulty, defective, or unfavourable. It may seem rather pedantic to you to use Greek words, but I really know of no two words in English which will express this meaning correctly, and I am the more disposed to use them, because they are now in general use both in France and Germany; *δυσ*, as I have before told you, when prefixed to a word, does not signify mere difficulty, it denotes something which is faulty or unfavourable, *aliquid in malam partem*, as in *dyspepsia*, &c.

The *duration of pregnancy* in the human race is forty weeks, or two hundred and eighty days, and, as far as I know, it *never* exceeds this term. From the great difficulty of determining the precise moment when conception has taken place, it has frequently been supposed that women may exceed the term of utero-gestation, and numberless cases are on record to prove it; but they must be all looked upon with a very suspicious eye, for not uncommonly they are a vile attempt at imposition to conceal loss of character and honour; nevertheless, in the majority of cases women have no other data to go by than the last appearance of the menses, and it is nearly impossible, to calculate by these means only, up to a day with any degree of certainty. From this reason the Code Napoleon allows three hundred days as the extreme duration

of human pregnancy, or twenty days beyond the usual time.

In Great Britain and Prussia the law fixes the extreme duration at three hundred and one days, thus allowing three weeks beyond the usual time. But why should the human female alone have no definite limits to the duration of her pregnancy? do we see these extra long pregnancies in common life, where there is seldom or ever any object in having them? This was remarked so long ago as by Dionis. "A woman," says he, "goes nine months, if no extraordinary accident or disease causes an abortion; those who say they go a longer or a shorter time have often their own reasons." It is curious to see how well aware he was of the real nature of these over-term pregnancies, or *partus serotini*, as they have been called, and what shrewd advice he gives respecting the conduct of the practitioner on such occasions. "On some occasions," says he, "the surgeon must not maintain that women go constantly nine months, for if a new married woman at the end of seven brings forth as fine and lusty a child as if she had gone the full time, if a widow is delivered of a son who is to be heir to her husband, ten or eleven months after his decease, or if a woman is brought to bed eleven or twelve months after her husband has gone a voyage, shall we say that such things are impossible? The reputation and honour of these women are at stake, and therefore the surgeon, for the peace and credit of families, must not only pretend to be convinced of the possibility of them, but likewise bring parallel cases to illustrate and prove it." I do not quote this, gentlemen, that you should follow his advice, but simply to prove that the circumstance had attracted notice more than a century ago.

My excellent friend, Professor Naegele, whose profound knowledge of the subject is not less than his extensive experience, assured me that he had attentively examined every case on record, and had not found one in which he could place sufficient credit to induce him to consider the *partus serotinus* as possible. An exact register of every patient has been kept for several years at the Lying-In-Hospital of Heidelberg, the results of which fully confirm his opinion. Owing to the uncertainty of the data from which women generally reckon, he says that perhaps he might be inclined to allow fourteen days beyond the full term of utero-gestation, but no more.

It might be fairly asked,—What is it that induces the uterus to expel its contents always so punctually at a certain time after conception (viz. forty weeks), unless some accidental circumstance has occurred to excite it to a premature action? I would define the reason why labour usually terminates pregnancy at the fortieth week to be from the occurrence of a menstrual period at a time during pregnancy when the uterus, from its distension and weight of contents, is no longer able to bear that increase of irritability which accom-

panies these periods, without being excited to throw off the ovum.

At my next lecture, gentlemen, I shall commence the subject of *Premature Expulsion of the Fœtus*.

CLINICAL LECTURES

DELIVERED

BY DR. ROOTS,

At St. Thomas's Hospital.—Session 1834–35.

Intermittent Fever—Use of large Doses of Medicine.

GENTLEMEN,—In to-day's lecture, I intend to make some remarks on two or three cases of intermittent fever which have come under your observation during the present session.

The first case was that of James Rogers, a sailor, æt. 28, admitted into the hospital on the 2nd of October, and who, though he confessed that he had drunk hard, stated that he had enjoyed generally good health. Eleven months prior to his admission, while in China, he was attacked by ague, and the paroxysms had continued to recur until the time of his coming in, though the disease during that period had occasionally changed its type, being sometimes tertian, and regularly tertian, then changing to quotidian, then back again to tertian, and then again to quotidian. During these eleven months he had only been free from the paroxysms a fortnight, and of late the paroxysms have kept to the quotidian type, and the rigor was on him at the time of his admission.

His countenance had the sallowness peculiar to the disease; there was considerable emaciation, his appetite impaired, tongue white, bowels open, motions dark-coloured, pulse 60, rather feeble; complained of aching pains in the left shoulder and knee, and also of considerable pain, with sense of fulness, in the forehead and back part of the head. This latter symptom, though aggravated during the paroxysms, was, to a certain extent, constant. Before applying to St. Thomas's Hospital, he had been an out-patient for three weeks at another of our metropolitan hospitals, but was no better.

Having carefully examined the abdomen and chest, and being unable to detect either congestion or inflammation, or any disease of the viscera contained in those cavities, I directed him to be cupped behind the ears to ℥ij., and to take quinquæ sulphat. gr. v. 4tis horis with pil. hydr. gr. v. omni nocte, and to be put on milk diet.

The report of the next day states that the pain of the head had been relieved by the cupping, and that he had had no paroxysm. Bowels being confined, was ordered to take a powder of rhubarb and calomel, statim. Three days after, the report states that he had continued free from any paroxysm, that he had no pain of head, and felt much better; his

gums, however, were tender, and the blue pill was directed to be given only every other night. To continue the quinine.

The report of the 14th, twelve days from his first admission, states that his general health had much improved, there had been no return of ague, and that he only complained of some irritation about the anus from piles, for which some of the ungu. gallæ comp. was ordered. He was directed to take the quina every six hours only, and was put upon full diet.

On the 17th, the quina was reduced to once in eight hours; and, at the expiration of another week, he was discharged, perfectly well.

Now, you will observe, that in this case the disease had continued almost uninterruptedly for eleven months, and therefore that there was great probability that organic disease might have occurred during that period. The organs most prone to take on disease in intermittent fever are the spleen, the liver, the alimentary canal, the heart, the lungs, and the brain; but I was satisfied that the viscera, both of the abdominal and thoracic cavities, were free from disease, while the constant though not severe pain in the head convinced me that there was some congestion at least, if not inflammation, in the brain; therefore it was that I ordered the cupping, and you will observe that the vessels being thus unloaded the pain ceased. The next step then was to prevent, if possible, the recurrence of the paroxysm, lest, during the cold stage, the vessels of the brain should again become congested. To effect this, I gave him the five-grain doses of the sulphate of quina, and I gave it him every four hours, because, the fever being quotidian, I wished to get down a quantity sufficient to make such an impression on his system as to prevent, if possible, the recurrence of the paroxysm on the next day.

You saw that it succeeded, that he never had any recurrence of paroxysm after that which was on the day he came in. At the expiration of ten or eleven days the frequency of the dose of quina was diminished to six hours, and, three or four days afterwards, to every eight hours. I did not think it prudent to make an earlier reduction, on account of the habit of recurrence having been established during eleven months, and therefore considered it necessary that the impression of the quina should be maintained on the system sufficiently long to prevent the probability of return, a result I have not unfrequently witnessed where the remedies have been too early discontinued.

Well, then, my reason for giving him the blue pill was the vitiated state of the secretions, as shown by the dark colour of the motions, and also as an adjuvant to diminish any congestion or inflammation going on in the brain. These are the principles by which I was governed in the treatment of the case, and they are those which long experience has satisfied me will be most successful.

Now why did not this man get well during the three weeks that he was an out-patient at another hospital? From the description he gave of the taste of the medicine when first asked by me what he had been taking, there could be no doubt but he had taken quina, and, in addition to the quina, he said that he had also taken, every other night, two pills which purged him moderately. On the day that I discharged him, some of you will remember, that I expressed my curiosity again to know how much quina he had taken for a dose in conjunction with those pills, and the man overhearing me searched in his pocket and produced his out-patient's ticket with the prescription written on it. It appeared that he had been taking two grains of calomel with eight of compound extract of colocynth every other day, and *one grain* of sulphate of quina *three times a-day*. In one respect, gentlemen, you will observe that the principle of the prescription was similar to my own,—there was mercury and there was quina; he took them, then, and the disease continued. Why did it continue?—First, because the congestion in the head was disregarded, and, secondly, because the quina was given in an *inefficient* dose, a dose almost ridiculous, both as regards quantity and frequency, where ague has existed nearly twelve months. At the same time I ought to observe that I do not believe that even a much larger dose would have succeeded until the congestion had been relieved by local depletion.

Now, in drawing your attention to this fact, gentlemen, you must not imagine that I am endeavouring to take credit to myself for any novel practice. I wish merely to impress on your minds what observation and experience have taught me to be true, that, in the treatment of intermittent fever, whenever you find proof of local congestion or inflammation in any internal organ evinced by pain, and, perhaps, by increased heat, and, where the part admits, augmented by pressure, you ought never to hesitate to deplete locally, either by cupping-glasses or leeches, so long as there is proof of the existence of such congestion or inflammation: of course the quantity of blood abstracted must in each case be dependent on the power of the patient. Should there be active inflammation or very extensive congestion, local bleeding will not be sufficient, and you must resort to general. At the same time, you must bear in mind that such local congestion is the effect of the cold stage of the paroxysm, that every occurrence therefore of this stage must necessarily tend to augment or reproduce such congestion, and that therefore, though your first object may be to relieve such local congestion by depletion, your next is to prevent its reproduction, by preventing as quickly as possible the recurrence of the paroxysm; and, to attain this end, never hesitate to commence giving the quina or other antiperiodic remedies at the same time that you deplete, and give them in such doses and

at such frequent intervals as will be sufficient to produce the effect you desire.

The next case was that of James Douglas, a labourer, *æt.* 50, who had been working in a marshy district, I believe in Essex, and who was admitted into King's Ward on the 20th of November; he had suffered under quartan ague for the last six months. The case-book states "his countenance to be characteristic of the disease; the tunica conjunctiva of the eye to be tinged with bile; complains of pain, which is increased by pressure, in the epigastrium and right hypochondrium; there is also some tension and hardness there, though neither the liver nor spleen can be positively felt enlarged; there is slight effusion into the cavity of the abdomen, evidenced by fluctuation, and for the last three weeks both legs have become anasarcaous; tongue foul; bowels, he says, are open; pulse 90, full." This was the state in which I found him at my first visit the day after his admission.

I directed him to be cupped over the right hypochondrium and epigastrium to \bar{z} xij., to take a scruple of our compound rhubarb and calomel powder every other morning, and gr. v. of sulphate of quina *6tis horis*; to be put too on milk diet.

Now the report of the next day, the 22nd, states that he had a paroxysm at the usual time; that of the 25th states there has been no return of paroxysm; has very little tenderness in the epigastrium; bowels open; tongue white, moist, and only slightly coated; pulse 74, rather weak.

On the 28th, abdomen had diminished in size; scarcely any tenderness in the epigastrium; legs much less swollen; plentiful secretion of urine; bowels open, motions bilious; tongue moist, and less coated; pulse 84, fuller; no paroxysm.

Dec 2. No pain or tenderness in abdomen, nor can fluctuation there be now detected; legs very little swollen; appetite good, and feels much better; gums tender; no paroxysm. To omit the rhubarb and calomel powder.

5th. Continues improving in every respect. To take the quina *8tis* instead of *6tis horis*.

9th. Doing very well, feels hungry, and directed to be put on full diet. The bowels being rather confined, and the swelling of the legs not quite gone, let him take \bar{z} j. of the compound jalap powder (jalap and supertartrate of potass) *alternis auroris*.

22nd. Quite well; discharged on 24th.

Now, you will observe, that the treatment of this case was very similar to that of the preceding: in the first the congestion was in the head, and therefore he was cupped from behind the ears; in the present the congestion was in the liver, and consequently he was cupped from the neighbourhood of that organ; but you will remember that, in the first case, I directed the quinine to be given every four hours, while in the second it was given only every six. Now my reason for this was, that the first being quotidian, I was anxious to

get down a quantity sufficient to make a strong impression on the system, and thus prevent, if possible, the recurrence of the next day's paroxysm. The disease, too, had existed eleven months. A sufficient quantity was thus taken, and, as I before stated, no paroxysm recurred after that which was on at his admission. But in the present case the type was different; and I considered that a sufficient quantity might have been taken, before the expected recurrence of the paroxysm, to have prevented it. I confess that I miscalculated the period; for, had I recollected that it was expected on the following day, I should have given it every *four* instead of every six hours; as it was, however, he had only one paroxysm after his admission.

The third case is that of a female servant named Kesia Dyer, *æt.* 39, admitted with quotidian ague Jan. 1, 1835. She had suffered under the disease six months, and had been confined to her bed during the last two months. At the time of her admission, the case-book states, she complained of headach and feeling of great debility; tongue dry and coated with a brown fur; slight cough, with some pain of chest. There is some tenderness on pressure over the whole of the abdomen, but more especially in the left hypochondrium, where the spleen can be distinctly felt increased in size, though apparently not very much. Countenance anxious, and of the hue peculiar to ague; eyes sunken; pulse 72, weak; no appetite. When first attacked was resident in a marshy district; legs oedematous. She was ordered by the apothecary of the hospital, Mr. Whitfield, to be cupped over the left hypochondrium to \bar{z} xiv., and to take gr. v. of sulphate of quina *6tis horis*.—Milk diet.

The report of the next day states—A paroxysm came on this morning at five o'clock A.M.; less pain in the splenic region; pulse 100, weak; bowels confined. Ordered to take an aperient powder of rhubarb and calomel.—To continue the quina.

3rd. Bowels have been acted on by the powder; tongue moist, covered with a white fur; pulse 110, stronger. Paroxysm again to-day, but came on at eleven in the forenoon, and lasted till two P.M.

4th. Paroxysm returned to-day at eleven A.M., but only lasted twenty minutes. Tongue cleaner; less thirst; no tenderness in the abdomen on pressure. To repeat the aperient powder.

5th. No paroxysm to-day. Feels better, and is more cheerful; bowels rather too much relaxed by the powder.—Continue the quina, and take *infus. catechu comp.* \bar{z} j. after each loose stool.

6th. No paroxysms. No occasion for the astringent; appetite improving; asks for better diet.—Beef tea *Ojss.* daily.

9th. Still free from return of paroxysm; going on very well; pulse 100, weak. Omit the beef tea.—A slice of meat daily instead.

13th. No unfavourable symptom; able to

get up, and, after being up, legs and thighs much swollen; general strength increasing; urine scanty.—Pil. hydr. gr. v. omni nocte.

16th. General health greatly improved; pulse now 72, full. As she was purged by the blue pill it was directed to be omitted; and as the secretion of urine still continued rather scanty, she was ordered to take hydr. c. cretâ gr. iiss., pulv. scillæ gr. j., opii gr. $\frac{1}{4}$, ter die, and the quina to be diminished to three times a-day instead of four*.

Now, you will observe, gentlemen, that in this case the paroxysm returned three times after her admission, and I cannot help thinking that this might have been prevented had the quina been ordered every four instead of every six hours; but I shall have occasion to refer to this subject again in my next lecture, when I propose offering a few general remarks on the treatment of the different stages of intermittent fever, and have also a case of extensive disease of the uterus which I wish to draw your attention to. I shall beg, then, to occupy the remainder of our time to-day by saying a few words upon a subject, which, if not immediately connected with the treatment of intermittent fever, is still sufficiently allied to it to consider this a favourable opportunity for so doing.

As having the honour, gentlemen, of being a teacher in this school, I think it due to all of you, as well as to myself, to offer a few remarks on a critique which has appeared in one of the public Journals, in reference to the doses of certain remedies employed by me in the treatment of a case of periodical neuralgia. You are no doubt all of you aware that I have such a case in the female wards, and in which, in the hope of putting a stop to the returns of the paroxysms, I had employed both sulphate of quina and carbonate of iron, commencing with five grains of the former and two drachms of the latter, every six hours, and gradually increasing the dose of each until I arrived at the quantity of eighty grains of quina, and four ounces of the carbonate of iron, in each twenty-four hours; in addition to which, at a later period, a quarter of a grain of muriate of morphia was given in conjunction with each dose of the above named remedies, which was ultimately increased to a third of a grain. Still, however, the paroxysms, though mitigated, returned, and, abandoning the use of these remedies, I had recourse to the local application of aconitine in the form of ointment, with the most marked relief. The case was published, by my desire, in the *Medical and Surgical Journal*, simply in the hope of attracting public attention to a new and powerful preparation of aconite, which promised to be a highly useful addition to our *Materia Medica*.

* Jan 30th. She has continued this treatment, the kidneys have secreted abundantly, and there is now scarcely any anasarca of the legs remaining. She will be discharged next week.—REP.

The case was extracted from this Journal into the *Medico-Chirurgical Quarterly Review*; and I cannot do better than read to you the remarks of the Editor from his own book. Having detailed the case as published in the *Medical and Surgical Journal*, he says,

“In the foregoing practice there was exhibited *bold practice* in respect to doses. We know Dr. Roots well, and believe him to be a very judicious physician. We should have great confidence in his prescriptions, because we are satisfied that he acts under the guidance of observation and reflection. Eighty grains of sulphate of quina added to one quarter of a pound of carbonate of iron, with a strong dose of morphia, make altogether a ‘*quantum suff.*’ that would astonish a Bonhomme, a Quinn, a Hahnemann, or, indeed, any man who had not studied at St. Thomas’s Hospital. We remember full well the sensations which we ourselves experienced some years ago, when taking twenty grains daily of sulphate of quina for an intermittent. The tense feelings about the head, the “tightness” (as Dr. Philip would say) of the pulse, the constriction in the line of the intestinal canal, the *cordiness* (if we might use such an expression) of every nerve, and the painfully vivid operations of the mind, left an impression on the memory which can never be effaced. There can be no doubt but that difference of temperament in individuals makes immense difference in the effects of medicine; but we have so often remarked effects corresponding with those enumerated, in various individuals, that we confess some degree of timidity in the *heroic* exhibition of medicines. With respect to the carbonate of iron, we suspect that a drachm dose would be just as efficient as a quarter of a pound—perhaps more so. We acknowledge, however, that it is by experience and not by theoretical calculation that we are to be guided in these matters; and therefore we have put the foregoing case on record, from the practice of a talented physician, in order that it may excite the attention of our readers.”

Well, now, gentlemen, to some it might appear that in these observations there is something like a sneer intended—something like sarcasm—something ill-natured,—but I, who know Dr. Johnson well, who know his great candour, the singleness, nay, the extreme simplicity, of his mind, can assure you that such is not the case. With respect, then, to the boldness of practice with which I am charged, in respect to doses, I would observe to you, that our object in prescribing any remedy is for the purpose of producing a certain effect, and that, therefore, we ought always to adapt our means to the end we have in view. If a patient applied to you for your assistance suffering under simple constipation of the bowels, and for which you prescribed five grains daily of the compound extract of colocynth, and after the patient had taken it many days you found no action produced on

the bowels, would you feel that you were doing your duty to the patient—that you were acting in a way becoming men of science, if you continued to exhibit the same useless dose? If you prescribed fifteen or twenty drops of tincture of opium every night for the purpose of procuring rest, but without attaining your end, would you not consider that man little better than an idiot who still persevered in so ineffectual a dose? If it was your purpose to excite vomiting, and therefore prescribed fifteen or twenty grains of ipecacuanha without making any impression on the stomach, would you think yourselves justified in the repetition of a dose, to the influence of which the organ had already shown itself insensible? Would you not rather adapt your means to your end, and either increase the dose of either of the remedies I have alluded to, until you had produced the effect you desired, or seek for some more active substitute? This was the principle, gentlemen, that I acted upon in the treatment of the case which has elicited Dr. Johnson's remarks. I have found quina alone often the most efficient means of checking periodical neuralgia, and where that has failed, I have succeeded by giving it in combination with the carbonate of iron. As this was an obstinate case, I commenced the treatment with the union of both remedies, namely, five grains of quina and two drachms of the carbonate of iron every six hours. These doses, however, proving insufficient, I *boldly* (according to Dr. Johnson), but prudently (according to my own experience), increased *by degrees* the quantity of each until I arrived at that terrific dose of each, which has excited the worthy Dr.'s comments, and without any other distressing symptom in consequence of the dose of each, than that the stomach was occasionally oppressed, and for a day or so the medicine requiring to be omitted. Do not, however, mistake me, gentlemen, it is by no means my intention to recommend you to commence with scruple doses of quina, or ounce doses of carbonate of iron. But commencing with smaller doses, never hesitate to increase those doses to such an amount as your judgment and experience may have shown you that in other similar cases your success has been commensurate with the increase of the dose. With respect to the opinions of a Bonhomie, a Quinn, and a Hahnemann, value them as I do, not even at the twenty millionth part of the weight of a straw. Dr. Johnson says, gentlemen, that such doses are not only calculated to astonish the three above named gentlemen, but indeed any man who had not studied in St. Thomas's Hospital. Now this I consider as a high compliment to us all, for it shows that we have the reputation of being "*nullius in verba magistri*," that, despising this or that consecutus, or this or that dispensatory, as a guide for the doses or the remedies we employ, we alone own the dictates of judgment and experience as our guide in such matters.

In reference to the quantity of quina (eighty grains) ultimately exhibited in this case daily, Dr. Johnson has favoured us with an account of his own sensations, when taking only a fourth of the quantity in the twenty-four hours. He speaks of the tensive feelings about the head, the tightness of the pulse, the constriction in the line of the intestinal canal, the cordiness of every nerve, and the painfully *vivid operations of the mind*. I cannot say that it has occurred to me to witness such effects from quina; it is true I have met with some peculiar cases of idiosyncrasy, where even the smallest portion of quina could not be tolerated, but I have not observed generally more unpleasant consequences from forty, fifty, sixty, or eighty grains in the day than from twelve. The effect which I have most generally remarked from full doses of quina, has been that the patient has complained of a rushing sound, like that of water, in the head, and this has been produced to an equal extent by doses of three or four grains as by those of greater magnitude. But let me impress it on your minds, gentlemen, that if on the exhibition of this remedy you should meet with such effects as Dr. Johnson complains of in his own person, immediately omit it; you must be doing wrong, you are placing him in a condition unnatural to him, and it would be cruel to persevere. But do not let the necessity for the omission in such a case prevent your giving it in others, but ascribe it to its real cause, the peculiarity of that individual's temperament.

And now, gentlemen, with respect to the timidity to which Dr. Johnson confesses, in what he calls the *heroic* exhibition of remedies, I own to you that I did not consider myself as entitled to laurels because I dared to give as much as eighty grains of quina every twenty-four hours, after finding fifty, sixty, and seventy ineffectual. But it is only due to the worthy Dr. to call to your mind, that at a former period, when not oppressed by this timidity I presume, he gave eighty grains of calomel in twenty-four hours, and that therefore he had long since earned those laurels which he so kindly bestows on me. In that gentleman's excellent work "*On the Influence of Tropical Climates on Disease*," when speaking of dysentery, he commences with a most interesting account of his own case, written whilst surgeon of a man-of-war. He was bled, took castor-oil, six grains of calomel and one of opium, too, were given every five hours, which latter was subsequently given every four hours, and his medical attendant comforted him with the assurance that his malady would abate so soon as the mouth became affected by the mercury. In spite, however, of these six grain doses of calomel, the symptoms continued, nay, increased, the doses were inefficient, the means were not adapted to the end, and finding himself grow worse, and his gums still unaffected, he sent for his assistant, and desired him to bring him

twenty grains of calomel. He found no bad effect from this, but, on the contrary, he fancied that the tormina were rather lulled by it. Still, however, the desired effect was not produced, and again in two or three hours he sent for his assistant, ordered another scruple dose of calomel, and swallowed that, a few hours after which he fell asleep, and then relates, really in a most pathetic way, how he awoke free from pain, still fancying his state of comfort was only a dream. He then felt a call to use the night-stool; this made him fear that all his horrors were going to be renewed, but, on the contrary, he was delighted to find that he passed a copious bilious feculent stool with little or no pain. He then did that which every man possessed of such purely good principles would do, he uttered aloud the most sincere and heartfelt tribute of gratitude to heaven for his deliverance, and on getting into bed, he perceived that these two twenty grain doses of calomel had been sufficient to produce the effects which the smaller doses had been unequal to, that his gums were tender, and the saliva flowing freely from his mouth. He took no more medicine, and speedily was well. Was not this heroism, gentlemen? was there aught of timidity of large doses here? But let us see what was the result of this heroic practice on himself. When called upon subsequently to treat the same disease in others, he commenced with the ordinary doses which had been at first employed in his own case, but finding these small doses equally inefficient with others as they had been with him, he boldly resolved to adopt the same heroic treatment which he had found so successful in his own case. Accordingly, instead of six grains he gave twenty, once, twice, thrice, and occasionally even four times, in the twenty-four hours. So strenuously does the Dr. argue in favour of this *heroic* practice, that you will find it strongly urged through every portion of his valuable book. But, gentlemen, the greater part of you are no doubt already aware of this; most of you have read it, all of you I hope will read it, for it will well repay your time. It is true that, as the Dr. has observed with quina in large doses, he found these *heroic* doses of calomel sometimes productive of unpleasant effects, for he says, "in a few instances these doses produced great nausea and sickness at stomach, with *spasmodic* affections of different parts." Did the Dr., therefore, in consequence of these effects in a few, abjure its exhibition generally?—No; like a judicious practitioner he sought to combat these ill effects by the exhibition of opium and a diaphoretic, and he succeeded. So convinced was he of the efficacy of these *heroic* doses of calomel, that he has published a table in the work I am speaking of, to show the number of scruples that were in many instances taken before a cure was effected, and in one instance, as much as six drachms of calomel were taken in the space of seven

or eight days. It is only, too, of late years, I presume, that the Dr. has been less heroically disposed, for in the April number of the *Medico-Chirurgical Review* for 1826, page 328, when reviewing a work of Mr. Annesley's, entitled, "Practical Observations on the Effects of Calomel on the Mucous Surface of the Alimentary Canal," the Dr. commences his critique by saying, "Of late years certain *prejudices* and *erroneous opinions* respecting the *doses* of medicines have begun to give way. The Italian physicians have let in some light on this subject, and the medical men of the continent generally are taking advantage of it."

But, gentlemen, to return to the scruple doses of quina; understand that I did not reach that amount without having had previous experience of the safety, the advantage, and, indeed, the necessity for so doing, two examples of which I will relate to you, although they are mentioned in one of my clinical lectures which was published in the third volume of the *Medical and Surgical Journal*, 1833.

The first was a case of quartan ague, admitted some years ago into this hospital under Dr. Elliotson but treated by me, Dr. Elliotson being abroad; five grains of quina three times a day were first employed, but without effect; the dose was at last gradually increased to ℥j. still the paroxysms returned at the wonted hour. Arsenical solution was then given in conjunction with the quina, in ten minim doses; so that he took one drachm of quina and thirty minims of Fowler's solution daily. Dr. Elliotson returned just as the remedies had reached this amount, and finding that, spite of these doses, the ague continued, he ordered the patient to take the medicines *four* times a day, instead of three, and the ague directly ceased; remember, it refused to yield to a drachm of quina and half a fluid drachm of arsenical solution, but was instantly overcome when the former was increased to *four* scruples and the latter to two.

The second case occurred in my private practice about six years ago.

I was consulted by a lady in Wimpole-street, a West Indian, suffering under intermittent neuralgia of the supra-orbital branch of the fifth nerve, preceded by a slight rigor; the pain came on every morning at eight o'clock and lasted till two in the afternoon. She had suffered under the disease several weeks, and, under the idea that it was arising from hepatic derangement, had been at Cheltenham for a month, where she had undergone the discipline of calomel, blue pill, Cheltenham waters, and leeches to the temple. Still the neuralgia returned as severely as before, and at the same hour. Now three grains of quina given every four hours were sufficient to stop the return; and she remained free from it for more than two months, but having taken cold one evening in coming from a party, where the heat of the rooms had been great, the neuralgia returned the next day. I was

again desired to see her, prescribed again gr. iij. of quina every four hours; made no impression; increased the dose to five grains, and it speedily yielded. She now remained well for nearly three months, when she visited the Colosseum on a cold day, with an easterly wind, to which she was exposed on the top of that building for half an hour; the next morning the usual rigor and neuralgia returned. Now in this third attack I found five grain doses of quina every four hours perfectly useless. I increased it to seven, ten, fifteen, but still without the slightest effect in preventing the recurrence of the paroxysm. I then increased the dose to ℥j. and she immediately got well, and remained so up to the time of her return to Demerara, a period of twelve months after. So that in this case ʒij. of quina were taken in each 24 hours, forty grains more than the quantity which has excited Dr. Johnson's remarks. Did the result justify this increase of dose, or not, gentlemen?

It is well known, too, to most of our military and naval medical officers, that prior to the discovery of quina, the intermittents of the West Indies often required most enormous doses of bark to be given before they could be controlled, and I recollect the late Dr. Dunkin mentioning an example of the major of one of our regiments taking ultimately the monstrous quantity of a pound of powdered bark daily, a fact which the major himself corroborated upon my accidentally having been introduced to him.

I come now, gentlemen, to the last of Dr. Johnson's critical remarks; he says, with respect to the carbonate of iron, that a drachm would be just as efficient as a quarter of a pound, perhaps more so. If this was a practical truth, then have I been guilty of a double offence, I must have wasted the funds of the hospital, and loaded my patient's stomach unnecessarily, to say nothing of misleading those gentlemen who may have been following my practice for the purpose of guiding their own hereafter. Now I am quite ready to admit that if I prescribed carbonate of iron, merely for the purpose of increasing the colouring matter of the blood, that I should expect quite as much advantage from even half Dr. Johnson's quantity for that purpose, as from an ounce or a quarter of a pound; but this is a purpose for which I am rarely in the habit of using this preparation of iron; the diseases in which I am most commonly in the habit of using it are those belonging to the class neuroses, and I will take chorea as my chief example. I am quite satisfied that there has been no case of chorea admitted into this hospital under myself or under Dr. Elliotson, that has not been discharged from the hospital cured; if any of you know of such an instance, I will thank you to inform me (the reply was that no example was known). I know of but one instance of death in this hospital of a patient suffering under chorea, and that took place not from the chorea, but with the chorea,

for, upon a post-mortem examination, most extensive fungoid ulceration was found in the bladder, with abscesses in both kidneys, in addition to which extensive effusion had taken place in the brain. Now the remedy that I am principally in the habit of employing in the treatment of this disease is the carbonate of iron; and I have no hesitation in stating to you my conviction that the successful result of the cases has been the consequence of a necessary increase, from time to time, of the dose of the remedy.

I have taken a patient into the hospital suffering under this disease, I have prescribed a drachm, or perhaps two drachms (which I am most commonly in the habit of doing) every six hours. In a day or two my patient has been better, but if I have persevered in the same dose so long that amendment has become stationary, if I have persevered still longer in the same dose I have found my patient retrograde, but if I have increased the dose from two to three drachms, or have given the two drachms every four, instead of every six hours, I have invariably found improvement commensurate with the increase of the dose, as soon as the disease has become stationary. Most, if not all of you, can bear witness to the truth of my assertion, but as I always think one fact is worth a thousand assertions, I will just mention a case, which one or two of you perhaps may recollect:—A young girl, *æt.* 17, was admitted between two or three years ago, under my care, into this hospital, suffering under the severest form of this disease I remember ever to have witnessed. It had arisen from fright; she was out at a latish hour in the evening, and received a tap on the shoulder from some naughty old man, accompanied by an indecent proposal; from that moment she became the subject of St. Vitus' dance, and, after suffering under it some time, was taken, as I afterwards learned, to Guy's Hospital, where she remained several weeks; being no better she quitted it and came to St. Thomas's; the convulsive motions were so violent that it was necessary to strap her in her bed to prevent her falling out, and it was a work of extreme difficulty to the sister of the ward to watch her opportunity to put food into her mouth by means of a spoon, so little power had she over the muscles of her jaw. While I was in the act of prescribing for her for the first time, one of the pupils present hearing me direct the carbonate of iron to be given, said "Oh, sir, she has tried that without any advantage;" and it was then for the first time that I learned that she had been in Guy's Hospital. On enquiring the dose and frequency in which that remedy had been administered, I found that two drachms had been given twice a-day, ordered, as I understood, on the day of her admission there, and had never been increased until she quitted that hospital; I did not, therefore, hesitate to say to him, that the remedy had not been fairly tried, and that if he would take the trouble of

watching the case he should find that she should get well under that remedy, and that remedy alone, though differently employed. Two drachms were therefore directed to be taken every six hours, there was slight improvement, it was then ordered to be taken every four hours, there was greater improvement; she continued this plan for some days, and the disease appearing stationary it was increased to three drachms; it was thus, as circumstances appeared to demand, increased a drachm for each dose, whenever the disease appeared again to be stationary, and each increase of dose was attended by a correspondingly marked increase of improvement, until at length she took as much as one ounce every four hours while awake, and, at the expiration of between eight and nine weeks, quitted the hospital perfectly well. I could multiply these cases, gentlemen, if I chose, but it would be taking up your time unnecessarily. You have had, and will have, ample opportunities of verifying my statement.

Do not however imagine, from the illustration that I have brought forward, that carbonate of iron ought necessarily to be employed in every case of chorea, I am referring only to those cases, and certainly they form by far the greater majority, in which its exhibition may be proper. And I shall take an opportunity of occupying your attention upon this subject before the close of the present session.

I trust, gentlemen, that what I have said may have absolved your minds from any doubts as regards the propriety of the doses I have employed, which Dr. Johnson's remarks might by possibility have created; I think I have some right to claim to myself some small knowledge of both the doses, and the effects of all the remedies we employ. I have had 25 years of practical experience in my profession, during many of which I was attached as physician to three of the largest institutions in this metropolis, which furnished me with never less than eleven, and often with twelve, thousand patients annually, for whom it was my duty to prescribe.

ROYAL INSTITUTION.

THIS valuable Institution commenced its meetings on Friday, 23rd Jan., when Dr. Faraday delivered a lecture "On Radiant Heat," illustrative of the discoveries of Signor Melloni, a young Italian philosopher residing at Paris.

The learned Professor remarked, that as all his auditors must be well acquainted with the chemical phenomena of combustion, the source of light and heat, he should not occupy their time on that subject, but should rather direct his observations to the rays of heat, their nature, and the manner in which we became sensible to them.

We become aware of the presence of heat by its power of expanding objects; the usual way of proving this is by applying heat to a

glass bulb, full of atmospheric air, and continuous with a tube containing any liquid. The effect of heat is to expand the air in the bulb, which consequently enters the tube, and displaces the liquid. The experiments that have been made hitherto have all been performed with this instrument, but the Italian philosopher did not like to employ it, as he did not consider it sufficiently accurate to ascertain the presence of heat, and accordingly he made an instrument similar to this (*placing his hand on one on the table*), but on a smaller scale. It consists of two metals, in this instance antimony and silver, joined together by wires, with a magnetic needle attached. If one of these junctures were warmed, an electric current runs round the circle, and the needle is set in motion; previous to the application of heat it was stationary, and, as the metal cools, it reassumes its former situation. If the instrument be formed of successive portions of metals, as first antimony, then bismuth, then again antimony and bismuth, and so on, the effect will be very much increased, and the operator will be enabled to test a much smaller degree of warmth.

M. Melloni has been enabled, by means of this instrument, to settle a point which has long been considered doubtful by philosophers, that is the intensity with which the rays of heat pass through a body. If a plate of glass be held to the fire, the rays of light will be observed to pass through it as rapidly as through the air, but it is not equally the case with the rays of heat, and hence plates of glass are frequently used by noblemen and princes in their palaces to guard against the inconvenience of large fires, while the genial warmth may be diffused through the apartment. Let an experiment be made with a piece of rock-salt, and it will be found that the rays of heat will pass instantaneously through it, without warming the body they pass through.

Let any sort of light,—a lantern will do,—be employed, and different bodies placed within its rays, they will then be found to possess different properties, which are expressed by the terms transparency, translucency, and opacity. Glass will serve as an illustration of transparency, rock-salt and wax, of translucency, and the metals, of opacity.

By having recourse to similar experiments the rays of heat will be found to possess analogous properties, which have been termed by Signor Melloni *diathermal*, in contradistinction to *diaphanous*. To illustrate the meaning of what has been just advanced, take any source of heat, a naked lamp for instance, and place it at a certain distance from the pile, (the thermometer of Signor Melloni, which he has designated the *thermo-multiplier*, the *galvanometer* *), so as to bring it to 100 degrees,

* Described in the commencement of this abstract as composed of two metals, connected with wires, and having a magnet attached.

then place screens between it and the pile, and the action of the magnetic needle will indicate the quantity of the rays of heat transmitted by the medium employed. If a piece of glass be the screen it will not offer any interruption to the passage of the rays of light, but it will exert great influence on the transit of the rays of heat. Alum again will allow a different quantity of radiant heat to pass through it, and we shall find also a difference in the amount transmitted, if rock-salt be the body intervening between the rays of heat and the pile. Colour appears, perhaps, to exercise some influence on the quantity of heat thus passing, as will be proved by the following statement:

If the pile be brought to 100 degrees, by means of a lamp, and a piece of flint glass then intervene, 65° only will penetrate, if plate glass, 60°, crown glass, 50°, and green glass, 23°. But a very marked difference has been found to exist in different bodies, all of which are colourless, rock-salt will allow 92° to pass, Iceland spar, 62°, carbonate of lead, 52°, sulphate of baryta, 33°, borax, 28°, sulphate of lime, 20°, fluor spar, 15°, tartrate of soda and potash, 12°, alum, 10°, and, finally, although certainly not to be classed among the colourless bodies, sulphate of copper, 0°.

As an illustration of this, the following experiment was performed:—A piece of glass, which was very thin, while the rock-salt used was considerably thicker, the disadvantage therefore being on the side of the latter, were passed between the lamp and the pile, and it was ascertained that the glass transmitted more rays of light, and is consequently *diaphanous*, the rock salt allowing the rays of heat to pass more freely, and is therefore *diathermal*. Glass may be said to be transparent to light but opaque to heat, rock-salt opaque to light and transparent to heat.

The very dark-coloured quartz, called black quartz, will not permit the rays of light to penetrate it, but those of heat readily pass through, and the same may be said of black mica,—so that there are some bodies which are transparent to light, and not to heat, as glass; and some to heat and not to light, as black quartz, mica, &c.

Another point, which this Italian philosopher has endeavoured to prove, is, that light and heat are totally distinct; the theory of the present day is, that they are the same in principle, but Signor Melloni considers that they are essentially different, and he supports his opinion by the fact just mentioned, that some bodies are permeable by heat alone, others only by light. Dr. Faraday does not go with him throughout in his opinions.

Some illustration of his discoveries, relative to colours, were then offered, and, in doing so, Mr. Daniell's apparatus for burning lime was made use of.

[In prosecuting this experiment the theatre was darkened, and a solitary ray of light, that from the apparatus, was visible. With the aid of the prism, Dr. Faraday bent this ray,

at the same time separating it into the primitive colours, and he then showed the effect of passing different glasses between the apparatus and the wall, one kind leaving only the blue and some of the violet, another abstracting all but the green and a little of its yellow, and a third taking all but the red. In order to illustrate more forcibly the connexion of the ray proceeding from the apparatus with the spectrum on the wall, Dr. Faraday altered the position of the apparatus, and directed the ray to the ceiling, and it could then be clearly observed proceeding from the instrument to the spectrum. The experiment was very evident, and had a very beautiful effect. He also demonstrated that if two pieces of glass of different kinds, namely, one removing the red ray, and the other the green or blue, were placed before the spectrum, the effect would nullify the ray, and no light would be seen.]

He afterwards remarked, Signor Melloni has endeavoured to establish the same thing with regard to heat. He took two plates of alum, and found that the rays of heat passing through the first plate will also penetrate the second; but if the second plate, instead of being alum, should be of glass, the rays will be arrested in their progress, and not pass through. Supposing one hundred rays of heat were to pass through the first plate of borax, seventy would be transmitted by the second, were it also of borax, but if it were alum, only eleven would pass, and it is the same with all other bodies, so that if two plates are used, it is necessary that they are both of the same substance.

The refraction of light may be proved by a simple experiment. If a piece of silver, a capsule, be placed at the bottom of a basin it will be hid from sight; it is surrounded by the atmosphere, but when that is displaced by water, without in the least disturbing the position of the capsule itself, it will gradually become visible. This is owing to refraction of the ray of light; the ray passing from the air into the water is suddenly bent downwards, and thus renders the object visible.

It has always been a very difficult matter to refract heat, but Signor Melloni has been enabled to effect this object, by availing himself of the transparency of rock salt for heat. He found that glass was not sufficiently translucent, and he therefore employed a prism of rock salt, with which he was enabled to refract the rays of heat in the same way that refraction of light takes place, and he could do this not only with the rays from a lamp, but even with those from hot water.

In conclusion, the Professor made a remark relative to the polarisation of light, in allusion to the experiments of Mr. Forbes, of Edinburgh. A ray of light, he found, would pass readily through a plate of tomentine, and also through a second, if in precisely the same position, but if the situation of the second plate be changed even slightly, the passage of the rays will be arrested. Rays of heat will

pass readily, even under those circumstances where the rays of light are arrested.

In the preceding abstract of a highly interesting lecture, we have endeavoured to give the pith of the discourse, without attempting to follow the exact language employed.

When the lecturer had concluded his remarks, he directed the attention of the meeting to a fine bust, by Chantrey, of John Fuller, the munificent patron (for such he really was) of the institution. The inscription bore, "John Fuller, who gave ten thousand pounds for the promotion of science in the Royal Institution." In the library we saw a fine portrait, by Pickersgill, of the late Earl Spencer, many years President of the Institution. On the table, also, besides several mineralogical specimens, and two instruments for parallel motion, there were a cast of a fossil head of a bird preserved in the Ashmolean Museum, anatomical and scientific works and plates, and also specimens of spectacles for riding and for strabismus, made under Mr. Curtis's directions. The principle on which they are made consists in having the oval space for the eyes larger, and the substance filling it up convex, so as to resemble the anterior part of the natural eye.

Dr. Ritchie delivered a discourse on Friday, the 30th, giving a "Comparative View of the Newtonian and Undulatory Theories of Light."

Reports of Societies.

MEDICO-BOTANICAL SOCIETY.

January 27th, 1835.

THOMAS EVERITT, Esq., Professor of Chemistry, in the Chair.

THE announcement of presents this evening was rather lengthy; numerous additions have been made by members and others to the herbaria and cabinet of materia medica. A collection of indigenous plants was presented, put up in a very beautiful manner, each plant being named according to its scientific and its common nomenclature, the name of the month in which it was gathered, and the nature of the ground where it grew, being also mentioned. Had the donor added the class and order, according to Linnæus and Jussieu, and the medical virtues, where such are in existence, the present would have been invaluable; as it is, it forms a most important addition to the collection of dried specimens in the possession of the Society.

After some further business had been gone through, Dr. Ryan, the Professor of Materia Medica, proceeded to read what he called a "Comparative View of the Organic and Inorganic Systems, showing also the differences between plants and animals, and between *animals and man*." A more complete failure we have seldom been unfortunate enough to

witness; page after page of the manuscript was skipped "in order not to fatigue the Society," and what was read was certainly not worth listening to. One of the principal distinctions made between organic and inorganic bodies was that the latter increase by *chance* or *hazard*, while in the former the different sexes contribute to the perpetuation of the species. The Doctor must have been hard pushed when he gave such a definition. Again, he only produced one distinctive mark between the vegetable and the animal kingdoms, and that one was worthy the author of the "Lectures on Population," and of the forthcoming work "On the Perpetuation of the Species." He said that plants were distinguished from animals, inasmuch as to produce fecundation they do not have recourse to intromission, that is, a close union of the sexes does not take place! *Proh pudor!* Could no other example have been chosen? Considering that the majority of the audience at this Society are non-professional men, it was a bold flight, but somewhat of the Icarean character, and we may venture to predict that the attempt will not be repeated. The conclusion of the subject, the difference between *animals and man*, was postponed to a future evening, and dearly do we hope to be present, in order that we may be made aware of the difference; for, previous to the Doctor's promise to point it out, we did not believe in its existence. We are exceedingly anxious to know by what figure of speech, whether Hibernian or Gascon, or by what peculiar species of ratiocination this "cultivator of science," to use a favourite phrase of his, will prove that *man is not an animal!* As we have already remarked, hitherto he has been considered such, but it is possible that the Doctor has some new lights upon the subject, with which he will doubtless favour the scientific world. In the meanwhile we take our leave of him, and proceed to more useful matter, protesting, most energeically, we never yet heard such exquisite *nonsense* doled forth by any man, except when the same lecturer, some months since, delivered his opinions on the *effects of strychnine*. He will understand what we are alluding to.

The remainder of the evening was occupied with the consideration of the therapeutic properties of the *Ballota lanata*, a specimen of which had been recently received from Vienna. Dr. Negri observed that Professor Brera had published an account of this plant in an Italian periodical, from which it appeared to possess considerable influence in the treatment of chronic rheumatism. It was given in the form of decoctions, $\frac{3}{4}$ ss. of the plant (gradually raised to 3vj., and even to $\frac{3}{4}$ j.) being boiled in $\frac{3}{4}$ xij. of water down to half a pint. This being strained, half was administered night and morning with good effect. It appears to act on the urinary organs and on the skin, causing a burning heat of the integuments, then profuse diaphoresis, followed by

increased diuresis, the fluid passed being of a high colour, and depositing a red sediment on standing.

The account of the plant which was sent from Vienna with the specimen stated that it possessed analogous properties with colchicum, acting one while on the bowels, another on the skin, and sometimes on the urinary organs.

Dr. Johnson felt desirous that some of the plant should be procured, in order that its real properties might be essayed, as he considered it extraordinary that increased micturition should be produced, the urine being high-coloured and sedimentous. Where the secretion of the kidneys is scanty, it is high-coloured, and deposits a sediment; but when it is more abundant than usual, it becomes uniformly limpid; at least he had always found it so, and would be obliged to any medical man who had seen any case where the contrary was the fact.

It was soon after announced that Mr. Burnett, the Professor of Botany, would, if his health continued to improve, deliver a lecture at the next meeting, which would be held on Tuesday, February the 10th.

LONDON MEDICAL SOCIETY.

Monday, February 2nd, 1835.

EDWARD LEESE, Esq., V.P., in the Chair.

Hooping Cough.

The principal speakers were Dr. James Johnson, Dr. Burnes, Dr. Leonard Stewart, Dr. Whiting, Dr. Uwins, and Dr. Negri;—Messrs. Clifton, Dendy, Headland, Moore, Greville Jones, and Leese.

The subject of hooping-cough was resumed this evening, in consequence of a dearth of other matter, after having formed the subject of debate for several preceding evenings. Very little additional information was elicited, notwithstanding there was a greater number of speakers than is usually the case at this Society.

Mr. Clifton commenced the discussion by remarking that he always cured hooping-cough by restricting his little patients to an apartment of an equable temperature—from 54° to 60°. By a perseverance in this plan for about a month or six weeks a cure would generally be effected. He remarked that hooping-cough was never considered a serious complaint in summer, and this was making an artificial summer in winter; of course it was only applicable previous to any inflammation manifesting itself.

Several members spoke partially in favour of this plan, but some of them did not appear to place entire confidence in hygiene alone, but were inclined to have recourse to medication in conjunction with it. Mr. G. Jones alluded to the experience of Mr. Whitmore of

Cold-Bath-Fields, who, he said, was very much inclined to trust to a similar plan where it could be adopted, but employed a higher degree of temperature. Dr. Burne spoke of the necessity of guarding against injury to the brain from the shock produced by the violence of the cough: he had seen it cause insensibility, lasting some hours, in two cases. The preventive measures he would recommend were moderate depletion early in the disease, soothing medicines, a total proscription of animal food, and attention to the bowels.

Dr. Uwins ascribed the disease, in the first instance, to an affection of the nervous system, and more especially of the pneumo-gastric nerve. He recommended change of air as a valuable adjunct in the treatment of the complaint, and mentioned rather a curious fact in illustration. He stated that three of his children had had hooping cough, and he immediately sent them to Royston, the air of which, as every one knows, is *sharp and bracing*; here they soon lost their cough. Shortly after they paid a visit to an uncle in Suffolk, where the air is *mild*; while on this visit the complaint returned, but disappeared again when they went back to Royston.

Dr. Whiting had ascertained that the return of the cough was owing to an accumulation of phlegm. After a fit of coughing he had listened to the respiration, and there was no mucons râle, but in a few minutes it commenced, and kept gradually increasing. The little patient for a time would be quiet, and then would commence hacking, as if to relieve itself of the phlegm and to avoid the cough, which, however, at last supervened, and then the mucous râle would be absent for a time. In hooping-cough, when spontaneous vomiting took place, a favourable result was always expected. He would suggest small doses of the antimonium tartarizatum, therefore, in these cases, about one-twelfth to one-twentieth of a grain. He had given it in this manner some years ago to a child, and he found it improve the appetite and increase the strength of the patient, and he had since employed it as a tonic, and considered it one of the best we possess.

Dr. Negri confirmed the statements of Dr. Whiting as to the efficacy of antimonium tartarizatum in small doses in hooping-cough, but denied, most positively, its efficacy as a tonic; on the contrary, he believed it to be one of the most debilitating medicines we possess, and it could only be considered a tonic in the same way that bleeding, by lessening congestion, would relieve the circulation.

Dr. Whiting explained that he only considered it a tonic in the small doses he had mentioned, but Dr. Negri declared he believed it to act as a debilitating in all doses.

Reviews.

Records of General Science. By R. D. THOMPSON, M. D., with the assistance of THOMAS THOMPSON, M. D., F. R. S., &c. No. II. February, 1835. With Three Woodcuts. Taylor.

THE observations we made on the appearance of the first number of this Journal, showing its high importance and value to the medical practitioner, need not another repetition. The present number, it will be sufficient to state, is not inferior to its predecessor.

The first article is a "Biographical Account of Alexander Volta, by M. Arago." The biographer claims for Volta, and justly so, the merit of originating the Voltaic battery; though Lavoisier and Laplace succeeded in the first experiment, he shows that Volta "planned the means of discovery and the actual experiments, and is entitled to the credit of the success." After noticing the early periods of the life of Volta, describing the scene of his discovery, he is traced to Geneva, where "he founded a warm friendship with the historian of the Alps, who was well able to appreciate the value of his discoveries. That was a great age," marks the biographer, "when the traveller, without losing sight of Jura, could visit Saussure, Haller, Jean Jacques, and Voltaire. Volta, after an absence of a few weeks, returned into Italy by Aigue Belle, carrying with him, for the benefit of his country, that precious root, whose proper cultivation renders famine almost impossible." "The School of Pavia became the object of his attention, (Count Firmiali, the Administrator-General of Lombardy). He then established a chair of physics, and, in 1779, conferred it upon Volta. There Volta taught, for many years, numbers of young men, who congregated from all parts of the country, not indeed the mere details of science, which can be learned from books, but the philosophical discoveries, and those minute facts which escape vulgar intellects."

The whole essay is full of interest. To study the life of a great man is one of the most useful lessons that men can learn. He sees industry, perseverance, and talent surmounting all difficulties, and ultimately obtaining, if not riches, the respect and admiration, not only of his cotemporaries, but the renown of posterity.

After this we meet with a "Chemical Analysis of Shulite," an "Analysis of Arden Limestone," and the first of a series of papers entitled, "Notice of some Improvements in Science," by the Editor. One of these notices we shall extract; it is on a subject of which the world knows little, if anything.

"Acoustics.

"It has been recently observed by M. Breschet, that, in many of the chondropterygious fishes, as the skate, torpedo, &c., there are open

ducts, leading out externally, by which a communication is established between the centre and the membranous cavities of the labyrinth, while in many of the osseous fishes, especially the *cyprini*, or minnow tribe, and the *clupea*, or herring tribe, &c., an opening exists between the swimming bladder and the labyrinth. He has likewise detected in the sacs of the labyrinth in man and vertebrated animals concretions which he terms *otolites* and *atocopies*.—(*Ann. de Chim.* 56). M. Cagniard Latour has obtained some curious results from his experiments on the sonorous vibration of liquids, and has attempted to explain the use of the concretions observed by Breschet. In employing a glass tube one metre in length, closed at the bottom and filled with water, he found that, when rubbed with a moist cloth, a sound was produced, resulting principally from the longitudinal vibration from the column of water, yielding 790 vibrations in a second. A syphon, open at both ends and filled with water, under the same circumstances, afforded an acute sound. Hence we can account for fishes hearing in cases where their auditory organs contained no gaseous matter. He tried the effect of vibrations upon other liquids. Several substances more dense than water afforded more acute, others more grave, sounds than that liquid. Among the first are carbonate of potash at 71°, and muriate of lime at 87°; among the second, sulphuric acid at 150°, sulphuret of carbon, and mercury. The same observation holds with liquids possessing an inferior density to water. He concludes,—1. That the liquids in human ears are contained partly in species of tubes. 2. That these tubes or canals are osseous. 3. That the semicircular canals have a curvature answering to that of the syphon. The sound appears to be increased by introducing a solid in contact with the water; for, with a water-hammer containing several small rounded stones, the globular vibration of the liquid took place without requiring to have any impulse communicated to it, as with the common hydraulic hammer. Hence, he conceives, that the concretions in the labyrinth may facilitate the globular vibrations of the liquid in which these bodies are suspended. Latour and Breschet are both engaged in the further prosecution of this interesting subject. The latter is investigating the functions of the semicircular canals in the slug."

Then follow some interesting notices in the same essay, viz.—on Electricity; Magnetism; Pneumatics; Chemistry, in which is a table of the specific heat of bodies; Atmospheric Air; Compounds of some of the Gases; the method of procuring *selenium*, the nature of some of the acids, and of some of their combinations with metals, &c. After the "Improvements in Science," follow a number of treatises on curious topics to the geologist, mineralogist, and chemist.

A Treatise on Rickets; with a New Theory of Ossification, and a Plate and Description of an Improved Reclining Couch for the Distorted. By G. HUME WEATHERHEAD, M. D., Lecturer on Materia Medica and Therapeutics at the Westminster School of Medicine. Pp. 128. Second Edition. Reunshaw. 1835.

IN the preface Dr. Weatherhead commences by stating, that "In none of the systems of physiology, which I have seen, is there any theory of ossification; the progress of the process is minutely described, but the manner in which it is accomplished has never yet been attempted to be explained. The main component of bone is the phosphate of lime, this matter is continually being deposited by the secreting arterial capillaries, and again taken up by the absorbents, and yet the wonderful thing is, that the phosphate of lime is not soluble in the fluid from which it is abstracted, phosphate of lime is not soluble in blood."

Our author has endeavoured to explain the paradox, and with what success our readers shall judge. After discussing the chemical composition of bone at the different epochs of life, the mode of development and the priority and succession of perfect formation in the different bones, we are brought to the subject of rickets, divided into infantile and adult. From the following observations we should suspect the Doctor to be averse to civilised life. "But where is it to be found? Are we not all children of nature? Is there a wide difference between the black, now but just emerging from slavery,—that people, which formerly shed the light of literature and science in Asia, whence it was reflected into Europe,—and is now receding, we hope, to its original abode. We are all savages, we tear, lacerate, and feed upon each other like the inhabitants of the deep! We differ in mental proclivity and bodily vigour, but we are all subject to the same "ills that flesh is heir to."

"Rickets is distinctly a disease in the train of civilised refinement, for nature, when acting unshackled by the trammels of art, and uncorrupted by the devices of luxury, rarely denies to man the regular proportion of his limbs. The savage, who, wild and uncontrolled, freely ranges the forest, is noted by all for the regularity of his form, the activity of his body, and the health and vigour of his constitution. It is the pampered progeny of excess, indolence, and debauchery, that are the martyrs of diseased indulgence."

The different changes in the configurations of the skeleton in rickets are enumerated, and the author's views on the most advantageous treatment to be adopted, in the infantile as well as in the adult affected with this disease.

On the theory of rickets, Dr. W. states, after making some general observations on the agents of secretion and absorption, and on the composition of bone and the elements of blood,

that "the phosphate of lime is the earthy matter giving solidity to the bones; but the phosphate of lime is nearly, or entirely, insoluble both in water and in blood, nevertheless, all must grant that it is deposited from this latter fluid, and yet blood is not a solvent, as we have said of this earthy salt, then this earth cannot exist in the blood simply in the state of a phosphate. The super-phosphate of lime is perfectly soluble both in water and in blood, therefore our purpose is to show that it does exist in the blood in a state of a super-salt." The idea is exceedingly ingenious, we do not remember to have seen it before. The facts adduced we have not room to transcribe. On the treatment of rickets many useful suggestions are offered.

We notice a "reclining couch for the distorted," the plan of it seems good, it deserves putting into operation.

There are some curious points in the work, we would recommend the Doctor to further investigate them, and men, who read for knowledge, to peruse what is written.

An Address delivered at the Birmingham School of Medicine and Surgery, on the occasion of the passing of the appended Laws and Regulations. By JOHN JOHNSTONE, M. D., F. R. S.

It is gratifying to the lovers of science, to our profession especially, to see medical science emerging, as it were, from the trammels of trade, and endeavouring to erect, by the united exertions of its members, a noble superstructure for itself, but it is, moreover, interesting to see that in Birmingham the noble and the wealthy join hand in hand with the profession. It appears like another dawn of the sun of science, stretching out her rays from caverns that the vulgar would pronounce dark and dismal.

We have been so much interested with the perusal of the present address, that we cannot forego the pleasure of making the following extracts.

"I might here enter on a detail of the instruction imparted by this School, and the means of affording it; but you yourselves will estimate it from one fact. Since the anatomical bill came into operation, forty-three bodies have been permitted to be anatomically inspected, by the wisdom and just feelings of the overseers; and thus the most minute instruction has been imparted to the students. Judge of your own security, and of the security of the public, from such opportunities; and I am sure it must be a high gratification to those noble and honourable members of the legislature here present, to know that their views in enacting that bill have entirely answered, so far as our own experience goes, and that the prejudices against dissection have been mainly extinguished. It was for this purpose that we threw open our museum to the public gaze, and let me add the public admiration, during

the past month; and I am delighted to affirm, that not one instance of disregard to property, or of disrespect to persons, was manifested; and that of the thousands and tens of thousands that flocked through the museum, every one expressed his gratification, and his conviction that the museum has been furnished for the good of the community.

"I have thus brought the history of our School to the period of its having a fixed abode; though with many and great conveniences, yet far from complete. But even then, the chief subject of admiration to all was the springing up of the museum, as it were by magic. This, too, was chiefly the work of the mind and the hands of Mr. Sands Cox; and you who viewed it in its primitive state, what must be your opinion of his merits and exploits, now that you view it in its present advancement? The store of the most curious anatomical preparations, and those most useful for the instruction of the pupils—the wax models so unrivalled in beauty and exactness—the replenished state of the museum of natural history—the library—and, above all, the fitness as a whole, for its great purpose, the instruction of our pupils in the auxiliary sciences which administer to medical education.

"The house which you are called upon this day to consolidate and render permanent as a School by the laws you shall ordain, has been put into your hands by the public spirit of the two proprietors, the lecturers in anatomy and *matéria medica*; and rears its front no less a monument of their generosity than of their ardour in the promotion of science. To them though thus mainly indebted as proprietors, yet on the whole body of the lecturers the Institution must always chiefly depend, on their exertions, on their ability."

"Of the former lecturers who have resigned their offices, it cannot be deemed invidious for me to select the name of Dr. Pearson for particular mention; his age, his classical erudition, his research into medical lore, especially his diligence in exploring the properties and virtues of medicaments, his sagacity in discerning diseases, and that ardent thirst for knowledge which is the surest test of success in imparting it, need not the humble meed of my testimony—yet these were the qualities and accomplishments which made him so useful a lecturer in this School, and which so materially helped it on in its progress. To Dr. Booth like thanks are due; his large stock of medical acquirements, and his rare acquaintance with foreign medical learning, combined with his early patronage of the Institution, were precious advantages, which were afterwards continued by his clinical lectures. It was said by an illustrious man, on an occasion which must have stirred up the whole soul of his compatriot auditors to sympathy and tenderness,

Ἀνδρῶν γὰρ ἐπιφανῶν πᾶσα γῆ τάφος,

and so to elevated minds their own munificent and generous actions are a sufficient memorial.

But it is the duty of those who receive benefits not to forget them; it is even their business to record them, when they are of a public nature, and for the sake of posterity not to bury them in oblivion."

A MEDICAL ASSISTANT'S LETTER TO
THE LONDON MEDICAL AND SUR-
GICAL JOURNAL.

*To the Editors of the London Medical and
Surgical Journal.*

GENTLEMEN,—I am one of those almost helpless and degraded beings called "Medical Assistants." Long, in silence, and in common with hundreds of others as unlucky as myself, have I brooded on the hopelessness of my case, and hoped (how vainly!) that time would bring a remedy for our evil; but, alas! years after years have rolled away and left no trace of improvement in our condition. Can you wonder, then, if goaded by feelings nearly akin to despair, my solitary voice should be raised in the tone of complaint? No; I judge from the liberal sentiments uniformly expressed in your excellent Journal, that, so far from considering what I am about to say uncalled for, or condemning my motives, you will acknowledge their justness and sympathise in my suffering. The hand of oppression is strong upon us, and unless the medical press afford succour, where shall be our place of refuge?

Would you, gentlemen, believe, that after having served an apprenticeship of five or seven long years, in the dispensary or shop (as it may be) of a general practitioner, upon our emancipation from this state of vassalage, our services are worth no more than 20*l.* or 25*l.* per annum to any professional gentleman who may have occasion to employ us! and that, during our employment, no starling in a cage enjoys less liberty than we do! Very few among us can obtain a salary of 30*l.* or 35*l.*, and but a choice number, indeed, the (among us) almost unheard of sum of 50*l.* per annum! No matter what degree of ability we may possess, the helpless state into which the want of foresight in our parents or guardians has plunged us, admits of no alternative save accepting the miserable pittance offered in the shape of salary, or starving! If, perchance, a discontented victim venture to remonstrate with his principal on this inadequate pay, his soul is frozen within his body by the following reply: "Oh, young men like you should not enter the profession. I give as much as my neighbours, and, besides, are you not acquiring experience?" To the first part of this speech we can give no other answer than a shrug, but to the latter portion of it, about experience, the majority of us can conscientiously rejoin "we get little or none;" and if we did, and rendered ourselves more efficient, would our stipend be increased? No; what then is the value of the experience

our employers talk of, and for which, though a non-entity, they make us indirectly pay, by giving us such scandalously trifling remuneration? Alas, gentlemen, we are an ill-treated race, and, unless the legislature or public press take our part, a hopeless one. Should you do me the favour to insert this in your widely spread journal, you would confer an obligation on

A MEDICAL ASSISTANT.

THE

London Medical and Surgical Journal.

Saturday, February 7, 1835.

REMARKS ON THE PAPER READ BY
SIR HENRY HALFORD AT THE
COLLEGE OF PHYSICIANS.

"ECCE ITERUM CRISPINUS."

"Gravedigger. Have you sold those ancient bones you wot of?"

"Old Bones. Aye, marry have I! and now come for a fresh stock."

Old Play.

IN our last number we intimated that we should make a few remarks on the paper delivered by the learned President of the College of Physicians, we now proceed to redeem our promise.

This was the first meeting for the season, and took place on the 26th ultimo. Every admirer of the science of medicine present could not but feel proud of the brilliant array of talent and consequence which graced this gathering of our *soi-disant* profoundest members, marking the increased estimation in which our profession is held. Two of the highest functionaries of this realm, the Archbishop of Canterbury and the Lord Chancellor, supported the learned President on the right and left. Nearly seven hundred persons, among whom were Sir Robert Peel, most of the Ministers, Judges, Bishops, and a host of smaller note filled up the imposing picture, all of whom *erectis auribus* awaited with intense interest the opening of the learned President's classical and ornate paper,—a paper, perhaps, suited to the mixed

auditory present, but we feel justified in saying exhibiting little research and less science. A rapid glance at the heads of the paper, which for its length was worthy of a better subject, will demonstrate the truth of what we have advanced.

The subject chosen was details connected with the decease of a few distinguished individuals of more modern times, the President having despatched the more ancient in a former lecture. The sketch began with Henry the Eighth, who, after having dragged himself into disease, finished his blustering career, the beautiful of "hydropsie" at the age of 56. Wolsey, to whom "Bluff Hal" gave (in his capacity of physician we suppose) some notable instructions how to evade the sweating sickness, died of a complication of dysentery and broken-heart, having first predicted the hour of his death. Edward the Sixth died of what very few could have survived, the sequelæ of measles and small-pox, which, in the succeeding year, after undergoing these diseases, aided by the efforts of an old woman, recommended to attend the King by the Duke of Northumberland, carried him off. Queen Mary, of persecuting memory, died of a sort of *double entendre*, her dropsy having been mistaken for pregnancy. The wily and puritanic Oliver Cromwell left this world quarrelling with his physicians, in consequence of a diseased spleen. Charles the Second died of apoplexy, after having been bled to sixteen ounces, cupped, purged up and down, swallowing twenty-five drops of spiritus humani cranii, and having the names of fourteen physicians appended to a prescription! King William, Prince of Orange, died of the consequences of pneumonic inflammation, brought on by a fall from his horse, which, breaking at once his collar bone and an old pleuritic ad-

hesion, accelerated the catastrophe. Mary, his consort, died of small-pox. Poor Dryden's dissolution was caused by ossification of the arteries of the extremities, which produces mortification. Demented Dean Swift, of unluckily facetious memory, left this world from a paralytic affection, the germs of which pre-existing in his frame in the shape of irritability, the learned Præses opines warred against his mental sovereignty and subdued it. An apoplexy carried off George the First, and George the Second died of a rupture of the right ventricle of the heart. On the mental, which preceded the corporeal death of George the Third, Sir Henry did not enlarge, so we at last come to the late Duke of Gloucester, the cause of whose death was seated in the liver, involving the stomach in so great a degree of irritability as to render it incapable of retaining the smallest quantity of food; of course nature unsupported closed his earthly career, and we could wish that the learned President also had in this point concluded *his* lengthy paper, instead of prolonging it into a funeral oration. His post-obit praises of the late Duke sounded like flattery, were in bad taste, and should, at all events, have been confined to that portion of his character, of which Sir Henry had had doubtless better opportunity of judging than many of his hearers. The public character of the Duke the public knows without any flourish of trumpets from the College of Physicians.

Of such materials, then, was the learned President's paper composed, and were Sir Henry a man of mediocre attainments, and driven for lack of genius to make his bill of fare a bill of mortality we should not quarrel with his taste, or condemn his spectral cavalcades of post-mortems, however we might deem their exhibition

fitter for the bone-house than for the arena on which they figured. We should have regarded this propensity for parading before our eyes the phantoms of the dead, each with his scroll of evil under his arm, as a matter not amenable to our criticism, had such propensity been fraught with no evil, nor lessened the utility of the man. But knowing as we do that Sir Henry possesses a highly cultivated mind, and talent of no ordinary stamp, we feel called upon to say, that his late lecture was not the homage science expected from him, more especially as she had lifted him to proud pre-eminence, and fixed him on a pedestal, whence he looks down on his humbler brethren. Such a lecture, we repeat, was not the offering she expected, and Sir Henry would do well to reflect, ere he delivers another, on the claim which the public has on those blessed with the power and opportunity to benefit it. Sir Henry well knows that the business of science, as well as of life, is to move forward, and must be aware that it would be more in keeping with the scientific dignity belonging to his order, to dilate upon some topic of more general interest and advantage than the one chosen. Were our humble advice to be received, we would counsel the learned President to abandon to the gravedigger the musty carcasses of olden time, which he has now, for the second time, raised from their rest, and ponder, as Sir H. Davy and a host of other illustrious benefactors to science have pondered, on what is truly great and useful.

If, as we have heard reported, Sir Henry, some time ago, proposed some scheme of Medical Reform to his brethren of the College, which they scouted, might not such a theme be advantageously considered on the next occasion? It would be, if not quite so grateful to the ears of

his auditory, as the history of men "whose brains are out," more instructive, and the moment chosen for its exposition would give it additional effect.

We conclude by assuring the learned President, that the silky tissue of his eloquence, more particularly when applied to the superfluous elucidation of what is already sufficiently clear, is not, in these times, the peg on which to hang either popular applause or the respect of the profession. Something more solid, more beneficial to the age in which he lives, is expected from his acknowledged talent; and if such good be incompatible with the empty tinkling of sounding sentences and nicely balanced periods, it should supersede them.

MEDICAL ASSISTANTS.

A LETTER which appears in the columns of our present number, subscribed "*A Medical Assistant*," seems to claim some attention, on account of the melancholy truths which the writer therein enarrates.

We have been long aware of the difficulties and mortifications under which this silently enduring class have pursued their weary and monotonous task, ill paid and ill treated in nine cases out of ten; no master-spirit has arisen among them to state their grievances or make their feeble voice heard beyond the humble precincts of their laborious occupation, and being, generally speaking (for there are a few of superior education), unblest with that share of information which make men restive under the lash of injustice and oppression, they have hitherto endured their heavy lot with a degree of patience and unostentatious fortitude deserving of a better fate. In no other pursuit to obtain a living is the re-

muneration so inadequate to the services performed as in the medical profession, in so far as regards assistants. In no other rank of life is the difference between the employer and employed so strikingly conspicuous; the former, perhaps, rattling in his carriage, with his annual return of from 500*l.* to 1500*l.* or more, contents himself with doling to the latter, who is perhaps as well qualified as himself, the wretched stipend of 20*l.* or 30*l.* per year, forgetful of his eternal captivity and noisome drudgery; forgetful, too, that from early dawn to latest night his assistant is engaged in that petty detail of pills and nauseous potions which fills his principal's pockets, but leaves his own as empty of coin as his frame is of spirit. No day of rest is known to this step-son of *Æsculapius*; not even the sacred seventh brings him the holiday that enlivens all beside, nor cheers him with a cessation of his toil. And for all this close application and ceaseless subservience, what is his reward?—A little food for which he can have little appetite, and from twenty to thirty yearly pounds!

Now let us see, by the test of comparison, whether there be any justice in this. A lackey or a valet, who needs no preliminary expenditure of either time, money, or scientific study, to qualify himself for the discharge of his duties, receives at least as much, and often far more, pay for less irksome services than the medical assistant can obtain, although he must undergo, before he can qualify himself for his bitter task, a considerable outlay of money, time, and study! Commercial clerks and linen-draper's fags put into their pockets salaries which would put to the blush our medical assistants' modicum, and have this farther advantage, that, according to their abilities, so

are they paid; while our medical assistant, be his capability what it may, can get, unless by some peculiar accident or good luck, no more than the niggard sum alluded to! It will be observed, doubtless, that for this strangely low rate of remuneration some cause must exist which ought to be no longer tolerated. Let us explore this cause.

Medical assistants may be divided into three classes: the first and most respectable consisting of young men having good friends or some property, able to pay Professors' fees, &c., but wanting experience, and unable to bear the expense of living independently while attending hospital practice; the second, of such as, after their apprenticeship, possessing no funds to pay for attendance on lectures, &c., seek, by becoming assistants, to scrape together so much of the indispensable as may carry them on in their studies; the third and by far the most numerous caste are such as have no chance of establishing themselves as principals, but whose ill-judging and ambitious parents have thrust without preparative education, by means of some needy practitioner to whom a 50*l.* premium was too great a temptation to be withstood, into the profession, the interested master, although conscious that future degradation and misery would be the lot of his ill-starred apprentice, withholding that information which might have arrested his fate, viz.—that when his term of *servitude* was accomplished, a term of *study* far more expensive was to be commenced and achieved, ere he could become a member of his profession.

It is these last that press like an incubus upon the interests of the worthy and well educated assistant. It is these who, crowding to the metropolis from every corner of the empire, resort either to Apothecaries' Hall or other medical agency offices to seek,

or rather beseech, for employment; and a mortifying and degrading sight it is for a lover of his profession to behold this *once* misguided, *now* desponding and hopeless portion of it, obsequiously attending, at nine o'clock every morning, the levee of the hall beadle, each willing, for a bare subsistence, to cut under his fellow-sufferer's demand, and sell himself, respectability and all, for whatever trifle may be tendered. The article, such as it is, becomes cheap because too plentiful for the demand, and the cause of this over plenitude is to be found in the laws relating to our profession.

These, thank heaven, must soon undergo the pruning hook of a more intelligent legislature than that which enacted them. The gap through which *all*, without reference to prior education, entered into and trampled on our honourable profession is about to be closed, and the soil, on which the legitimate plant now withers, weeded and cultivated.

To our correspondent we say, we commiserate his condition, and will, when the proper opportunity offers, endeavour to ameliorate it by advocating a better system. In the meantime, we cannot forbear making that appeal to which even-handed justice prompts us. Surely the more respectable portion of our brethren will take into consideration the efficient and indispensable services afforded them by their assistants, and, disdaining to tax them to the utmost for a niggardly recompence, anticipate by present liberality that scale of remuneration which most assuredly a salutary revision of medical law will not long hence bring about.

Foreign Medicine.

ACADEMIE ROYALE DE MEDECINE.

Sitting, November 18th, 1834.

Irritability of the Heart.

An account was given by M. Castel, of some experiments made by himself and M. Amussat. They tend to confirm the observations already made by physiologists, that pulsation is perceptible in the right cavities of the heart after the other parts have become completely motionless, whence it follows that in them life is the last extinct. Two theories have been advanced as explanatory of this phenomenon. According to the one, the greater irritability of the right side of the heart is considered as offering an explanation of, while by the second it is attributed to, the stimulating influence of the venous blood, which exists in abundance in the right auricle, while the pulmonary blood is no longer sent to the left side of the heart. The latter one was adopted by Haller, and has since been generally received. The result of the experiments of M. Castel induces him to support the first opinion. Considering the presence of the blood in no way concerned in the production of the phenomenon in question, and regarding irritability as influenced by nervous agency, he imagines the right side of the heart to be more abundantly supplied with nerves than the left. Though he has hitherto been unable to demonstrate this point by dissection, he intends continuing his researches, and laying the result before the Academy. M. H. Cloquet feels assured that the right cavities receive nervous filaments in greater number, though not of greater size, than the left cavities; the proportion may be considered eight or ten to five or six. We have the evidence of Scarpa and Walter of Berlin, in confirmation of this anatomical fact.

ACADEMIE DE MEDECINE.

Sitting, January 13th, 1835.

President, M. LISFRANC.

Observations on the Diagnosis of the different Scapulo-Humeral Dislocations.

BY M. MALGAIQUE.

The most modern surgeons who have written on the subject of dislocations, Boyer in France, Astley Cooper in England, Monteggia in Italy, and Chelius in Germany, agree in recognising three dislocations of the humerus, viz. the dislocations said to be below or into the axilla, where the head rests upon the margin of the scapula beneath the glenoid cavity, the dislocation inwards or forwards, in which the head of the humerus is lodged beneath the pectoralis major, and the

dislocation backwards, when the head is thrown into the infra-spinous fossa. A partial dislocation has also been described by Sir A. Cooper, in which the head is placed in contact with, and to the outer side of, the coracoid process. Consecutive dislocations from muscular action are recognised by most surgeons.

M. Malgaique discusses these various opinions; availing himself of the assistance of surgical and pathological anatomy, and of careful observations on both the dead and living subject. His principal deductions from the above sources may be brought under the following heads:—

1st. We have five principal dislocations of the humerus, and also numerous varieties of minor importance.

2nd. The most common is that in which the head of the humerus is placed beneath the coracoid process, the neck being in contact with the anterior margin of the glenoid cavity; to this belong all the signs imputed to dislocation into the axilla, or that which is considered to take place inferiorly. M. Malgaique names it the infra-coracoid dislocation, and has pointed out two new and important signs, viz. the protrusion of the head of the humerus beneath the great pectoral muscle, and the increased extent of the anterior wall of the axilla in its measurement from its free margin to the inferior border of the clavicle. Another new sign, though not invariably present, is the rotation of the arm outwards.

3rd. The true nature of the dislocation inwards does not appear to have been hitherto described. M. Malgaique, in accordance with two observations of his own, and another borrowed from White, considers it as characterised by the elongation of the arm, a sign also common, in his opinion, to all the dislocations of the humerus; a corresponding elongation of the anterior wall of the axilla, the closer approximation of the humerus to the trunk, the impossibility of discovering the head of the bone in the axilla, the protrusion of this head beneath the great pectoral muscle internally, however, to the coracoid process. The head is placed immediately in the subscapular fossa, the greater tuberosity is situated anteriorly, the capsule is lacerated to a greater or less extent. M. Malgaique applies the term subscapular to this dislocation.

4th. M. Malgaique has been able to discover but three cases of true dislocation downwards in the various authors, the chief symptoms being the elongation of the arm to the extent of nearly an inch and a half, and the evident situation of the head of the humerus beneath the glenoid cavity.

5th. M. Malgaique regards the partial dislocation of Sir A. Cooper as impossible, substituting one in which the articular surface of the head of the humerus partly rests upon the anterior margin of the glenoid cavity beneath the coracoid process; in this dislocation alone the capsular ligament may remain uninjured, though it is commonly ruptured; he names it

the imperfect infra-coracoid dislocation. He gives the exact symptoms, concluding, in opposition to the opinions of Cooper and Dupuytren, that it is not more subject to spontaneous relapse than any other.

6th. There is the posterior dislocation by which the head of the humerus is placed in the infra-spinous fossa, and beneath the acromion process, whence M. Malgaigne names it the subacromial.

7th. The idea of consecutive dislocations from muscular action is absolutely rejected by the author.

SOCIÉTÉ DE MÉDECINE PRATIQUE.

Sitting, December 4th, 1834.

Osteo-Sarcoma arising from a Blow.

BY M. ROSSEAU.

M. Rosseau presented the left half of the lower jaw of a cow, which was killed at the Jardin des Plantes for the nourishment of the inmates of the menagerie. The disease, which existed to a great extent, had been caused by a blow from the handle of a whip. Similar diseases have arisen in individuals who have received very violent blows, as in a child, who having been struck severely on the shoulder, an osseous tumour was there developed, which caused his death.

SOCIÉTÉ DE MÉDECINE DE PARIS.

November 7th.

President, M. ROCHE.

Encysted Abscess of the Pleura.

M. Pruz read the case of an old man in whom were found obliterated tuberculous caverns, an encysted abscess of the pleura containing osseous particles floating loosely in the purulent secretion, also many fistulous communications between the cyst and the bronchii. He concluded by expressing a wish that the Society would confide to some member the analysis of the various morbid products he laid before them, especially with a view to ascertain whether the concrete osseous substance be identical in its nature with true bone.

M. Guibourt was then entrusted with the chemical examination of the smallest of these unique productions, and the case was ordered to be printed in the records of the society.

The plague has broken out in Alexandria, quickly spreading into every quarter of the town. It first appeared on board the vessels of the line Nos. 1, 4, 6, and the frigate Behera. Great anxiety exists with respect to the arsenal where more than 8000 labourers are employed; consternation reigns throughout the city, and all the richer Mussulmen have adopted the most minute sanitary precautions. Twelve years having elapsed since its last appearance, it is feared terrible ravages will ensue; the misery of the lower orders is excessive.

One of the most remarkable Cæsarean operations was performed by M. Stoltz, of Strasbourg, on the 20th of last December. The age of the patient was 26 years, her stature was 44 inches, and the antero-posterior diameter of the pelvis was estimated at two inches and a half. A healthy infant was extracted, and the state of the mother gives every hope of a favourable result.

A Bavarian physician had departed this life, as was supposed by his professional brethren, in consequence of a vomiting of blood, and he was laid out in the customary manner. According to the laws of the country, it is necessary that forty-eight hours elapse before the deceased be interred, the body, therefore remained exposed in the chamber. Towards the middle of the second day, the sister of the deceased, in order to remedy the unpleasant odour, sprinkled the corpse with an aromatic fluid, when the body was perceived to move, and the coffin creaked. Dr. Schmitsmuller, a friend of the dead alive, was summoned, and, after resorting to the various resources of art, the patient was restored.

Introduction of a Foreign Body into the Rectum.

The following curious circumstance lately occurred at Vienna. A young man, hoping to relieve himself from the effects of an obstinate constipation, introduced into his rectum a hooked piece of wood, the long branch of which measures five inches, and the short one three and a half, a space of two inches intervened between their free extremities. In endeavouring to extract the fecal matter, great pain was occasioned; he then endeavoured to withdraw it, but failing in his attempts, he introduced it still further, hoping that it would undergo digestion. After the lapse of three weeks a surgeon was consulted, who found that by introducing his finger he could just touch the extremity of the long branch. After the administration of an enema he gradually introduced his hand, and with some difficulty grasping the piece of wood, he withdrew it entire, thus constituting a novel case of delivery.—*Gazette des Hôpitaux, Jan. 22.*

Physiology of Man in a state of Mental Aberration.

BY DR. SCIPIO PINEL.

A valuable and interesting work has been lately published by M. S. Pinel, "La Physiologie de l'Homme Aliéné." It evinces profound research, and furnishes the most important novel indications for the treatment of insanity, to be substituted for those commonly resorted to.—*Op. Cit.*

Curative virtues of Cold Water.

The celebrated Professor of Anspach, known by his writings on the medicinal virtues of cold water, has opened a school in that town

for the promulgation of his system; there are already a number of students.—*Gazette Medicale, Jan. 24.*

Observations on Fractures of the Clavicle and the Neck of the Femur.

BY M. GERDY.

In the majority of fractures of the clavicle, we know that the shoulder is carried downwards, inwards, and forwards. The depression arises merely from the weight of the limb, when the fracture takes place at the junction of the external with the middle third of the bone, for an equilibrium of power exists between the deltoïdes and trapezius; but if it occur more internally, the action of the deltoïdes is augmented by that of the pectoralis major in the depression of the external portion of the clavicle. M. Gerdy also considers a certain degree of elevation of the internal portion of fractured clavicle to be accomplished by the almost perpendicular action of the sterno-cleido-mastoïdeus, rendering it requisite to raise the shoulder above its natural level, in order to reduce the fracture. The sinking of the shoulder inwards is easily accounted for. The anterior protrusion, M. Gerdy considers, is greatly favoured if the patient lies on his back in a soft bed, into which the body sinks, while the shoulders, especially the one deprived of its support, are brought forwards. This is an ingenious hypothesis, but it does not embrace all the bearings of the case, for the shoulder is thrown forwards in the erect posture; and we have also a fourth change in position, consisting in a kind of twisting of the external fragment, well pointed out in the excellent treatise of M. Grout.

In refutation of the assertion that it is impossible to lift the hand to the head, he cites two cases of recent fracture, and another old and unconsolidated in a gendarme, which, however, did not in the slightest degree prevent the performance of his various duties. Bichat was, therefore, wrong in considering the clavicle of such great importance with reference to the motion of the superior extremity, and in saying that fractures of this bone reduce man to the level of non-claviculated animals, there is some want of exactness, for many of them have very great freedom of motion in the thoracic extremities, as bears, dogs, and cats which last yield to monkeys neither in address nor dexterity.

The pain caused by the elevation and abduction of the arm, as in raising it to the head, arises from a tendency to carry the shoulder inwards, which occasions the riding of the bone, and consequently the pain, which is, therefore, a prominent feature in these fractures; but also a similar effect may be produced temporarily by a number of other lesions, some of them of minor importance. Two cases of this kind occurred to M. Gerdy, in which there was no appreciable lesion. This sign, therefore, regarded by some authors as

pathognomonic, he looks upon as essentially dependent on pain.

Of the fracture said to be external to the coraco-clavicular ligament, but which in truth must take place in some part of the extent of its insertion, which is continued as far as the articulation with the acromion, M. Gerdy mentions one case. The displacement is of course very slight. The indications of this fracture are evident, but they have hitherto been successfully fulfilled by our apparatus. M. Gerdy suggests, that keeping back the shoulder by means of Brasdor's corset, separating the arm from the trunk by the interposition of a cushion, supporting and drawing the elbow inwards by means of a sling, combined with the use of a rather hard and convex bed, might remove the difficulty. A slight deformity, he considers, may remain, but without impeding the motions of the shoulder joint; nor ought the pain, in many instances, continuing for some time after consolidation, to be attributed to the rough surface of the callus, but to the violent bruise the bone has received. M. Gerdy has seen it occur in fractures the most perfectly reduced, and even in consequence of other physical lesions from external violence.

Fractures of the neck of the femur, besides the causes which act directly, appear to result from two very different mechanical actions. In that arising from a fall on the great trochanter, there is a tendency on the part of the neck of the femur to recover itself; in the other, which is more rare, taking place from a fall on the knee or the foot, there is a tendency in the angle formed by the union of the neck of the femur with the shaft to become more obtuse.

The diagnosis of this fracture is often of the greatest difficulty. M. Gerdy has pointed out a new sign, which gives it a greater degree of certainty. The patient reclining on his back, with the limb extended and rotated outwards, the extremity of the foot may be carried slightly backwards, which is seldom the case where there is a simple contusion of the hip.

M. Gerdy considers that it is possible to confound the fracture in question with other lesions, even under the existence of shortening of the limb, and rotation outward. In support of this opinion he relates a case, which left him some time in doubt, from the circumstance that shortening to the extent of three inches appeared too considerable. But the only dislocation in which rotation outwards takes place, is the one which is inwards and upward on to the pubis, clearly indicated by the protrusion of the head, which indication M. Gerdy does not appear to have attended to. The fracture of the femoral neck is much more closely simulated by certain fractures of the pelvis, in which, it is true, the limb is usually turned inwards, but this may occur in the first case; and again, there may be rotation outwards, as happened in one case observed by M. Gerdy.

With regard to treatment, he prefers continued extension, by means of Boyer's apparatus, in cases where the shortening is considerable, but where it is slight and easily overcome he makes use of demi flexion.

M. Gerdy terminates his work by the relation of a case of fracture of the neck of the femur by a gun-shot wound, accompanied by hæmorrhage. The femoral artery was tied, and the limb placed in Boyer's extension apparatus. At the end of four months there was a shortening to the extent of an inch and a half, which at the end of a month had increased to nearly three inches. The femur became firmly united to the ilium, and the limb could never be of great use, but the recovery from so severe a wound was highly satisfactory, and tends to the confirmation of the idea, that fracture of the neck of the femur from a gun-shot wound, is less important than that of the shaft of the bone itself.—*Op. cit.*

Foreign Hospital Report.

HÔTEL DIEU.

UNDER MESSIEURS RECAMIER AND TROUSSEAU.

Tracheotomy for Œdema and Ulceration of the Glottis occurring in an Adult—Death during the operation.

A PORTER, 52 years of age, of large stature, but thin, in other respects of a good constitution, was admitted into the hospital in November, 1834. He said that during the last thirteen months his voice had gradually altered, becoming more and more hoarse, and is now almost inaudible. Respiration has become difficult, the expiration requiring the exertion of the diaphragm. Incessant orthopnoea, awaking suddenly from sleep, and dysphagia became so aggravated, that the patient could no longer lie down, or swallow anything but a small quantity of broth, and that with the greatest pain. An enormous swelling is perceptible at the superior opening of the larynx, and pain is caused by pressure in the region of the os hyoides. There is cough, but no expectoration, nor is any pulmonary lesion indicated by percussion or the stethoscope.

This man having formerly been affected with the venereal disease, an antisiphilitic treatment was adopted, during which the symptoms appeared somewhat to abate at first, but soon reappeared with so much violence, as to give rise to such imminent danger of asphyxia, that tracheotomy appeared to be the only available resource.

On being informed of his danger, the unfortunate man expressed the greatest anxiety for the necessary operation to be immediately performed, declaring that he should die suffocated unless he was enabled to breathe. From the urgency of the symptoms and the anxious wishes of the patient, M. Trousseau resolved on the operation, nor did the courage of the patient flag in the slightest degree.

The skin was hardly divided, nor was a drop of blood shed, when syncope and convulsive motions supervened. On coming to himself in a few minutes the operation was resumed, but the syncope and convulsive movements returned, respiration also appeared to cease. The patient was then conveyed to his bed, and the trachea quickly opened; syncope continued; the blood from the thyroid veins dribbled into the air passages, without any expiratory effort to relieve them but the spasms of agony. The body was placed on the side to favour regurgitation, and by suction through a canula the blood was withdrawn, but death had claimed his victim.

At the post-mortem examination, great tumefaction of the epiglottis was found to exist; the lips of the glottis were the seat of numerous deep ulcerations, and a scirrhous and œdematous swelling, the opening they surrounded being nearly closed. The tumefaction had also extended to the termination of the pharynx and the commencement of the œsophagus; tubercles, not, however, in a state of softness, were discovered in the lungs.

It is important to ascertain the causes of this deplorable case. That tracheotomy was absolutely necessary is indubitable. Had the access of the air been rendered possible, all immediate peril would have been removed, and the topical application of remedial agents would have been rendered available; though the pulmonary tubercles might perhaps have progressed more rapidly after the operation, yet by it some months or even years of life might have been secured, and the purposes of art would have been accomplished.

The operator has to reproach himself with having performed the operation on the patient in the erect posture, from its predisposing powerfully to syncope, although the example of the greatest surgeons and the resolution of the patient will excuse it to a certain extent. Surely the occurrence of syncope and convulsions should have been regarded as a warning. There can be no doubt that the operation should have been adjourned, and reassumed under less disadvantageous circumstances. The records of medicine contain but too many examples of individuals of so peculiar a moral constitution, that the sight of the instrument alone has brought on profound syncope, or have sunk during an operation without hæmorrhage occurring, excessive pain, or the lesion of any essential part. The surgeon should look on such individuals as a kind of *noli me tangere*, and though it be impossible to ascertain this previously, surely on the first proof of it the surgeon should suspend all further attempts, both in accordance with the rules of art and the dictates of prudence, whilst the patient is under the influence of this insidious fatality.

The lipothymic tendency must have been greatly favoured by the state of inanition to which this person, otherwise in good health, was reduced. A similar syncope would, per-

haps, in a different operation, have been of but little importance, but in this case the flow of a small quantity of blood into the trachea became a cause of death, which was rendered far more powerful from lipothymia already menacing life. Nothing but the collapse was wanting to prevent the effusion of blood into the bronchii giving rise to expulsive efforts, for in twenty operations for tracheotomy on young and feeble infants labouring under croup, I have never seen the slightest accident result from the escape of a large quantity of blood into the trachea; it was energetically expelled as soon as it had entered. In the case under consideration, syncope prevented any reaction against the cause of asphyxia, and the patient sunk from the reunion of the two conditions, the first of which alone proved fatal, whilst the second could only be so from the accidental swooning of the patient.

If, when the veins began to bleed before the incision into the trachea, a sponge had been carefully applied to the divided vessels, less blood would have been effused into the air passages, and the patient might have borne up against it. This precaution was not taken till too late.

The operation itself in a thin individual is so devoid of difficulty, as to offer no reason for its fatal result.

British Hospital Report.

WESTMINSTER HOSPITAL.

Concussion.—REBECCA TURNER, æt. 20, admitted into Anne's Ward, September 26th, 1833, under Mr. White; is of the leucopneumatic temperament.

On the previous night a shelf of heavy books fell down as she was passing and knocked her down, she falling and striking the left side of the head against the iron door of an oven. She was stunned at the time, but recovered from the shock, and a surgeon saw her in an hour and a half; he found a small, nearly triangular wound at the top of the left parietal bone, which he examined, and came to the conclusion that the cranium was fractured. He sent her to bed, bled her twice, and purged her freely. The next day he sent her to the hospital when her head was immediately shaved, and the wound was found to have nearly closed; there was some slight tumefaction at the part, and a feeling as if there were some irregularity of the bone, but no depression could be detected; the pupils were natural, and the breathing not stertorous; pulse moderately full, and rather slow; sensible only at times; body cool; no heat of scalp; can put out the tongue when desired; it is furred; gives indications of great pain in the head. Ordered cold lotions and purgatives; rest and starvation.

7, P.M. Some short time after the cold lotions were applied, she spoke sensibly, and was able to answer questions; she is now sleeping quietly.

27th. Passed a tolerable night, and is now perfectly sensible, and nearly free from pain; the bowels have acted well; the pupils are natural, and act freely; no numbness or paralytic affection of any part; pulse regular; skin cool. Empl. lytta nucleæ.

28th. Is much better; free from pain, except from the blister, which has drawn well; pulse good; bowels open.

29th. Continues to improve.

Oct. 1st. Discharged.

On Wednesday, in the Court of Common Pleas, a novel action was tried. It was brought by a blacksmith named Hawke, against Mr. Hooper, a surgeon in the London Road. The plaintiff, complaining of a dizziness in the head, went to Mr. Hooper, and had about 24 ounces of blood taken from him. It was maintained that the operation was unskilfully performed, and that the plaintiff having for some time after been unable to go to his work was entitled to damages. Mr. Aston Key and Mr. Callaway of Guy's Hospital, and Mr. Wm. Cooper, gave evidence, to the effect (as we find it reported in the daily papers) that certain pains described by the plaintiff might arise from an imperfect division of certain filaments of its nerves, so minute that they could not be seen, and which sometimes come over that part of the veins to which the lancet is usually applied, and sometimes did not. The jury found for the defendant.

ROYAL COLLEGE OF SURGEONS.

NAMES of Gentlemen who received Diplomas during the month of January 1835.—Isaac Flower, Codford-St.-Peters, Wilts; Jas. Cunningham, E.I.; John Symons Longdon, London; Decimus Hands, London; John Hodgson, Chepstow; Alfred Hall, London; Henry Drew, Bath; John C. K. Coates, Salisbury; Robt. Howard, Dean-street, Southwark; Mark Brown Garrett, Shaftesbury; John Spencer Birch, Blackburn; Wm. Augustus Watford, Speldhurst-street, St. Pancras; Louis James Lovekin, E.I.; Robt. Dade, London; Henry Taylor, Oxford; James King Walter, Devonshire; Fred. Shury, London; Walter Duke, Hastings; Prior Purvis, Greenwich; Henry Affrel Snowdon, Ramsgate; Albert Philip Owen, Tenterden; Nathaniel Millard, Haverfordwest; Frederick Palmer, Yarmouth; Wm. Foxton Haley, Moulton, Spalding; William Reidy, Kerry; Francis Wyley, Higham, Stafford.

APOTHECARIES' HALL.

NAMES of gentlemen to whom the Court of Examiners granted certificates of qualification on Thursday, the 29th of January, 1835:—James Clark, Hoxton Town; John Drury, —; J. Ash Kirkpatrick, Clithero; John Spencer Birch, Blackburn; William Kennard, London; Benjamin Newbury, Cheltenham; Edwin Smith, Cirencester.

APPOINTMENTS.

Naval.—Mr. W. Gunn, assistant-surgeon, late of the Isis, to be surgeon. Mr. Thomas Miller, surgeon of the Dublin. Mr. John Pillmore, assistant surgeon, to do duty at Haslar Hospital. Mr. J. Aighton, assistant-surgeon to the San Josef.

General.—Mr. Henry Rush, of Henrietta-street, Brunswick-sq., Lecturer on Comparative Anatomy at the Westminster School of Medicine. Mr. Sharpe, surgeon to the Leeds Lying-In-Hospital.

DEATHS.

Mr. James Riddlesdon, of Ashbourn, Derbyshire, surgeon. Richard Saumarez, Esq., F.R.S., who in early life had an extensive practice in London, and who published some works on Physiology and Medical Science. Near Quebec, Pierre de Sulis Laterriere, M.D., formerly of Upper Tooting, Surrey. Surgeon Sheils, of the East India ship Amelia. Mr. P. Dickson, of Newington, Surrey, surgeon. Mr. Davenport, of Eastwood, Nottinghamshire, surgeon. Mr. Joseph Sunderland, of Halifax, surgeon to the Dispensary there. Mr. James Apner, surgeon, of Ilfracombe. Mr. F. T. Doolan, of Coley, Somersetshire, surgeon.

MISCELLANY OF FACTS.

It is reported that Mr. Battley has communicated his formula for the preparation of the liq. opii sedativus to the Royal College of Physicians for publication in the new edition of the Pharmacopœia. Query,—Had Mr. Home's discovery any effect on Mr. B.?

We feel pleasure in recording the following

magnificent bequests:—The Duke of Northumberland has presented the sum of £100 to the support of the Newcastle Anatomical Museum just established. The Marquis of Breadalbane, in addition to the bequest by his late father, has given £400 in aid of the fund now raising for the erection and support of an Infirmary at Perth, to be paid by instalments of £100 per annum.

WEEKLY BILL OF MORTALITY.

London, Tuesday, February 3rd, 1835.

Abscess	1	Hooping-Cough	23
Age and Debility	34	Inflammation	43
Apoplexy	8	Inflammation of the	
Asthma	24	Bowels & Stomach	9
Cancer	1	Inflammation of the	
Childbirth	1	Brain	3
Consumption	58	Inflammation of the	
Convulsions	50	Lungs and Pleura	14
Croup	5	Liver, Diseased	5
Dentition, or Teeth-		Measles	20
ing	9	Mortification	26
Dropsy	16	Paralysis	3
Dropsy on the Brain	14	Small Pox	10
Erysipelas	1	Sore Throat & Quinsey	1
Fever	4	Thrush	3
Fever, Scarlet	7	Tumour	1
Fever, Typhus	1	Unknown Causes	1
Gout	2		
Hæmorrhage	1		
Heart, Diseased	3	Stillborn	14

Males 189 Females 219 Total 408

Decrease in Burials reported this week, 192

Books and Correspondents in our next.

METEOROLOGICAL JOURNAL FOR JANUARY.

MONTH. Jan., 1835.	Moon.	Thermom.		Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations			
		47	47	40	29.82	30.24	85	81	W.	N.W.	Cloudy	Fine	Fine
1		47	47	40	29.82	30.24	85	81	W.	N.W.	Cloudy	Fine	Fine
2		43	42	37	30.52	30.57	81	74	N.	N.W.	Fine	—	—
3		36	38	32	30.45	30.45	74	75	N.	N.N.E.	—	—	—
4		33	35	32	30.40	30.31	75	79	N.N.E.	N.E.	—	—	—
5		33	41	30	30.31	30.35	79	82	N.E.	N.N.E.	—	—	—
6	F Q	31	36	21	30.39	30.20	82	82	E.N.E.	E.N.E.	Foggy	Foggy	—
7		26	30	26	30.05	29.97	82	85	E.N.E.	N.E.	—	—	—
8		29	38	28	29.90	29.83	85	88	N.E.	N.E.	Fine	Fine	—
9		38	49	37	29.63	29.43	88	87	S.W.	S.S.W.	—	—	Rain
10		39	39	36	29.60	29.60	87	86	S.W.	S.S.W.	—	—	—
11		38	51	39	29.55	29.55	86	86	S.W.	S.W.	—	—	—
12		48	51	43	29.67	29.67	86	82	S.W.	S.	—	—	—
13		48	49	43	29.44	29.43	82	83	E.S.E.	E.N.E.	—	—	—
14	FM	47	50	44	29.38	29.30	83	86	S.E.	S.S.E.	—	—	—
15		48	49	46	29.37	29.41	86	88	W.S.W.	S.W.	—	—	Fine
16		47	49	38	28.84	29.16	91	85	S.	W.S.W.	Rain	—	—
17		39	46	39	29.34	29.56	83	82	S.S.W.	S.W.	Fine	—	—
18		40	43	29	29.24	29.24	80	80	E.	E.	—	—	—
19		41	43	31	28.90	29.10	80	87	W.	S.W.	—	—	—
20		32	34	26	29.71	29.90	86	85	N.W.	N.W.	—	—	—
21	L Q	38	37	29	30.19	29.93	83	85	W.	S.S.W.	—	—	Snow
22		37	43	36	29.91	30.05	87	86	N.W.	N.W.	Cloudy	—	Fine
23		42	46	41	30.08	30.02	85	82	S.W.	S.S.W.	—	Cloudy	—
24		45	51	40	29.85	29.91	80	80	S.W.	W.S.W.	—	—	—
25		50	50	46	29.94	30.00	79	80	W.S.W.	W.S.W.	—	—	—
26		49	51	43	30.00	30.14	83	80	S.W.	S.W.	Fine	Fine	—
27		45	51	40	30.17	30.17	78	86	W.S.W.	S.W.	Cloudy	—	—
28	N M	42	44	41	30.14	30.12	83	80	S.S.W.	S.W.	Fine	—	—
29		43	49	43	29.92	29.88	79	76	S.S.W.	S.S.W.	Foggy	—	—
30		47	49	38	29.85	29.80	76	74	S.	S.S.E.	—	—	—
31		42	46	41	29.75	29.87	74	74	S.S.E.	S.	Fine	Foggy	—

50, High Holborn.

WILLIAM HARRIS and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

LECTURES

INTRODUCTORY TO THE COURSE OF THE
INSTITUTES OF MEDICINE,

DELIVERED BY

ROBERT J. GRAVES, M.D.,

King's Professor, Dublin.

LECTURE X.

GENTLEMEN,—At our last meeting we spoke of the influence of poverty and want in augmenting the mortality of any particular community; on referring to what was then said, I find a few additional observations necessary, in order to prevent misconception as to the connexion between epidemic fever and seasons of want. It is by no means my intention to assert that fever cannot become epidemic, except in years of scarcity. Such a statement would be contrary to the truth, for it often happens that typhus is very general, both in Dublin and the provinces, when not the least dearth exists. Thus at the present moment (January, 1835), spotted fever is very common, both amongst the poor and the rich, although all sorts of provisions are very abundant. The same inappreciable atmospheric variations which occasion changes in the quality and type of fever, rendering it one year gastric, another cerebral, one season inflammatory, another nervous, are also sufficient to make it liable to great changes in its quantity and facility of diffusion. Indeed it is usual, as might, *à priori*, have appeared probable, to find a change in the quality of fever accompanied by a change in its quantity. Thus the moment the present fever assumed the type it now wears (which it did suddenly about three weeks ago), it at once began to diffuse itself extensively, arising spontaneously in many who were exposed to cold, and the operation of the usual causes of febrile action, and in others produced most evidently by contagion. Of the pupils attending the fever wards of the Meath Hospital, six sickened in one week, besides many patients admitted labouring under other diseases, and several nurses. If

however, in addition to the atmospheric causes now in operation, we had scarcity of provisions, and a state of unusual suffering among the poor, there can be no doubt that these circumstances would powerfully contribute to increase the spread of typhus in consequence of their rendering, by their combined effects on the body and mind, the great mass of the lower orders more predisposed to sicken, whether from atmospheric influence or from contagion. Having made these explanatory observations, let us return to our subject.

With respect to the chances of life, a few words will be sufficient. It may be worth while retaining in memory as a general fact connected with this matter, that, of a given number of children born in this country, one-third die before one year, one-half before the eighth year, two-thirds before the thirty-eighth, and three-fourths before the fiftieth year. You will, of course, understand that this calculation only applies to large numbers, for where the numbers are small, the results may be very different. Thus, on Patrick's day, in the year 1782, nine students walked from Trinity College, Dublin, to Bullock, where they dined. In 1833 eight of them were still alive, and I have not heard of the death of any of them up to the present period. I mentioned this fact the other day to a very fine old gentleman aged seventy-six, and he observed that he could communicate another of an opposite description. He said that he had served in the Irish volunteers in 1782, and that of his entire grenadier company, consisting of fifty men, there was only one now living. What a different fate overhung these two groups of persons. It is remarkable how long a certain set of men holding the same office sometimes happen to live in succession. There can be little doubt that the steady policy of the imperial court at Vienna has been partly, at least, owing to the extraordinary length of time the modern prime ministers of Austria, including Metternich, have lived. A similar successive longevity on the part of the rulers of Prussia, has aided other circumstances in aggrandising their territories, as has been well remarked by a late writer in the *Edinburgh Review*.

Some gentlemen who have heard me say so much respecting the chances of life, are anxious to have a short method of making an approximate calculation. The simple rule is, that the chances are equal that every healthy adult will live half the difference between his own life and eighty-one. This, which is the mode of computation generally employed, is very near the truth. Thus, if a man be forty years of age, the chances are equal that he will live half the difference between it and eighty-one years, viz. twenty years and a half, and, therefore, that the duration of his whole life will be about sixty years.

Having said so much respecting longevity, there are a few other points which remain to be noticed, as being connected with the general physiology of man. It is a remarkable fact that although there is no uniform proportion between the number of males and females produced by the same parent, yet that the total number of each sex brought into the world, taking the average of any large community, is nearly the same; or, to speak more exactly, that we have in all cases a small excess of males. The data that we possess, however, while they prove that this excess exists in all countries, seems to show that the amount differs in different places. Any person who takes the trouble of putting down the number of children in each family of his acquaintance, would find that in some there is a preponderance of males, in others of females, but when he came to arrange the whole under their respective sexes, he would be surprised to find their numbers so nearly equal*.

From a very extensive examination, it appears that in Germany and England the proportion of males to females is as twenty-one to twenty, while in Ireland it is generally as twenty-one to nineteen. Thus it appears that we have an additional Irishman out of every twenty-one born to have his head broken, at least, if the hypothesis be correct, which accounts for this greater proportion of males by supposing that Nature provided for their being destroyed in single combat or in war!

The necessity of this excess of males has been differently accounted for; but it would appear best explained, by supposing it for the purpose of providing for the greater mortality of the male sex before puberty. There is something in their constitutions which renders them more liable to fall victims to the diseases of infancy and childhood than those of the opposite sex; so that, after the period of puberty, the females slightly exceed the males in point of number. Thus, although the proportion of boys born is greater than the proportion of girls, the greater mortality among the former during childhood not only restores

the balance, but even causes a slight preponderance in the numbers of the latter, and this fact has been verified by making a comparative estimate of the adults of both sexes.

Some curious considerations claim our notice as connected with the proportion of males and females born, where the relative ages of the parents differ. An elderly man married to a young woman has generally the majority of his children boys, and *vice versâ*. "This," says Mr. Sadler, "compensates in some degree for the late marriage of the male, as otherwise such late marriages would consign a certain portion of the female sex to a necessary celibacy." Mr. Sadler also maintains, that early marriages are not more productive than late ones; that in the former case the mortality of the children is greater than in the latter, and therefore that they do not augment the population as much as they are generally believed to do. He has also endeavoured to show, that the marriages of the rich are not more productive than those of the poor, and that the increase of population is checked rather than otherwise by its density and degree of comfort. Certain it is, however, that many more women are barren among the rich than among the poor. Hence, it may be inferred (the discussion of this question is not within the province of the physiologist: I may, however, advert to it), that population will not be found to keep pace with the increasing wealth and comfort of the community. The richer people are, the fewer, it would appear, are their children; and, consequently, the elevation of the inhabitants of any country to a condition of increased comfort and independence, is not accompanied by a necessary tendency to an increased and superabundant population; and it is a fact, that population increases most slowly in those countries where the great bulk of the people are comfortable. I might instance that part of France, where the population does not double itself in the same time it quadruples in Ireland, Normandy, a province in which the peasantry are all small proprietors, and live in a state of comparative abundance.

With respect to the relation which the offspring bears to each parent, I shall beg leave to quote for you the following remarks, chiefly derived from Mr. Prichard's work:—Peculiarities in the progeny, or hereditary conformation, as it is termed, are generally supposed, and apparently with some ground, to be determined chiefly by the father; that is, the offspring follows principally the male parent, though it is liable to partake of the peculiarities of the mother. Children resemble in feature and constitution both parents, but I think more generally the father. In the breeding of horses, oxen, and swine, great attention is paid by experienced propagators to the males. In sheep, it has been commonly observed, that the black rams beget black lambs. In the human species, also, the complexion chiefly follows that of the father

* Born within the city of London and the bills of mortality, from Dec. 10, 1833, to Dec. 10, 1834—Males, 13,601; Females, 13,615.

and I believe it to be a general fact, that the offspring of a black father and a white mother is much darker than the progeny of a white father and a black mother. In the West Indies, the mixed offspring is descended from white men who cohabit with black women. In England, it often happens that black men who are brought from the West Indies as servants marry white women, while it is uncommon for black women to get husbands in England. The English Mulattos are consequently blacker than those born in the West Indies, who generally spring from the black concubines of white men. It seems indeed that, in some instances, the junction of a female of a certain species with a male of a peculiar character has had a further influence on the progeny of the former than any one would have expected; it has even influenced the character of several successive births. Thus a male quagga crossed a mare, and the mule resembled the quagga strongly. Two or three foals, which the same mare afterwards bore by stallions, had all more or less of the quagga marks! This fact concerning the quagga is very curious, and affords a faint analogy to what has been observed in certain genera of insects, where one impregnation fecundates not only the female actually in question, but several succeeding generations!

As far as the size or stature of the offspring is concerned, it seems to be pretty well ascertained by facts known to the breeders of cattle and horses, that this chiefly depends on the mother. Perhaps the sex of the offspring also is determined chiefly by circumstances connected with the mother. Some women seem to be prone to produce a great proportion of male, others of female, children; and I think these peculiarities are common among the females of particular families.

With regard to the relative number of males and females born from a given number of marriages in different ranks of life, it has been found that, though the aggregate number of each sex is nearly equal when we take the whole community, yet there is a difference in the number of each sex among the different classes into which that community is divided. Some interesting observations on this point have been made by M. Giron. He divides individuals into different classes; the first is composed of individuals whose employments tend to develop their bodily powers; the second, of those whose business tends to enervate; the third, of those whose employments are of a mixed description. He found that, in the first class, the number of male births exceeded the average proportion of male and female births throughout France; that, in the second class, the number of female births exceeded the average proportion of female to male births throughout France; and that, in the third class, the proportion of male and female births was nearly the same as the average proportion throughout France. Hence

he arrives at the conclusion, that the pursuits of agriculture tend to the increase of the male population, and that the habits of commerce and manufactures favour an augmentation of the female population.

In addition to what has been already said, let me make a few cursory observations on the variety in the proportion of births to a marriage. It has been supposed that the fecundity of marriages is in proportion to the comfort and independence of the community, and that fewer children are born from a given number of marriages in countries which are deficient in agriculture, industry, and the blessings of civil liberty. This, however, is not the fact. In England the proportion of births to marriages from 1800 to 1810, was as 4 to 1, and from 1810 to 1821, as 4·22 to 1. In Scotland and Holland it is as 4·2 and 4·20, while in Russia and several of the Italian states it is as 5·25 and 5·45, to 1. I shall not take up your time with these statistical details any farther than to observe, that in the degree in which a nation advances in prosperity and civilisation, premature and imprudent marriages will become less frequent, and the number of births be proportionally diminished. The lateness of marriages may be generally taken as a good test of an improved state of society, as exhibiting that power of moral restraint over his passions which should characterise civilised and intelligent man.

I had almost forgotten to mention the remarkable fact, that the cultivation of science and literature appears to be favourable to longevity, contrary to the opinion generally entertained on this point; indeed it seems that the man who is chiefly engaged in mental labour has a fairer prospect of length of years than he whose occupations consist in exclusive bodily toil. Franchini has enumerated one hundred and four Italian mathematicians of different epochs; he has ascertained the ages at which seventy of these died, and among them we find eighteen who had attained the age of eighty, and two of ninety, and this in a climate which is not generally considered to be favourable to longevity. In France, one hundred and fifty-two men of science and letters have been taken at random; half the number appears to have cultivated science, and about half to have devoted themselves to general literature; on adding together the age at which each of them had died, it was found that the average result would be above sixty-nine years, for each individual*.

* This average duration of the lives of literary men which is given by Hawkins, is evidently greater than can be allowed, neither are Madden's tables of the mean duration of the lives of *literati* free from the same error, as is well shown in the *Quarterly*.

Comparative Longevity of Female Authors of the last Century.—*Quarterly Review, No. 99, on Madden's Infirmities of Genius* *.

	Age		Age
Lady Russell	. 87	Mrs. Chapone	. 75
Mrs. Rowe	. 63	Mrs. Lennox	. 84
Lady M. W. Montague	. 73	Mrs. Trimmer	. 69
Mrs. Centlivre	. 44	Mrs. Hamilton	. 65
Lady Hervey	. 70	Mrs. Radcliffe	. 60
Lady Suffolk	. 79	Mrs. Barbauld	. 83
Mrs. Sheridan	. 47	Mrs. Delany	. 93
Mrs. Cowley	. 66	Mrs. Inchbald	. 68
Mrs. Macaulay	. 53	Mrs. Piozzi	. 80
Mrs. Montagu	. 81	Mrs. H. More	. 89

I may repeat here what I have already mentioned, that in England there is a remarkable difference between the mean duration of life in the agricultural and manufacturing districts, a fact which goes to prove that the mode of life, and the various physical circumstances connected with the different pursuits and occupations of men, have more influence than the mere effects of climate. Indeed it is one of the evils of civilisation that it forces a nation to earn wealth by the too often debilitating employments of manufacturing industry. However great and powerful in a commercial or political point of view manufactures may render a nation, it is established beyond all doubt, that the combining of people into large masses, which the perfection of manufacturing arrangements requires, has a strong tendency to spoil the race. Go into Manchester, or any of the large manufacturing towns, where men, women, and delicate children, are confined for ten, twelve, and fourteen hours to the heated and unwholesome air of a factory, and consider for a moment what the result of such a mode of life must naturally be, and what effects it must produce on the physical qualities of the race. Could you expect that a mode of life such as this, continued for several generations, should have any other effect than giving rise to a race of men characterised by degenerated stature, impaired energies, and premature decrepitude? Formerly few large cities were able to maintain their own population; the number of deaths exceeded the births, and they would have dwindled away, in point of inhabitants, had they not received from time to time a fresh supply from the country. This, however, is not the case at present. The numerous and important improvements in ventilation, watering, and other matters of police, as well as the more general diffusion of the comforts of life, and the more successful treatment of disease, enable our large cities to maintain their own population and even to increase it.

Some cities, however, seem, from the opera-

tion of unfavourable causes, incapable of supporting their own population; they are, however, very few in number, and it is probable that as the arts of life and the blessings of civilisation become more diffused, their number will be still further diminished. The principal, and I believe the only ones of this description at present, are Rome, Petersburg, and Stockholm; in these cities the number of deaths exceeds that of births. What the cause of the preponderance of deaths over births in Rome may be I have not been able to ascertain exactly, there is, however, a remarkable difference, the births being one in thirty, the deaths one in twenty-four. At St. Petersburg, in the year 1833, the births were 9,311, the deaths 17,085. It is to be observed, that at St. Petersburg the males exceed the females by nearly 100,000, owing to the great influx of servants and persons depending on the court. Modern improvements tend to remedy this loss in some degree; still it appears from the investigations of Mr. Robertson, that the greater mortality of children as well as of adults in all large towns opposes a very material obstacle to the increase of their population, particularly when combined with other causes unfavourable to reproduction and longevity.

A very curious subject for investigation has been lately brought forward in France and this country, namely, the supposed influence of season and atmosphere on the commission of crimes. The inferences which have been made with respect to this very singular question are by no means established, and I mention the circumstance *en passant* to excite your curiosity, in order that you may investigate it when opportunity offers. It has been stated that man is so much under the influence of physical causes, that the quantity of crime committed in any great mass of society varies with the seasons, that each season brings back a recurrence of the same crimes, and, even as to minutiae, almost exactly in the same proportions. This fact seems to be explicable by the varying wants, varying opportunities, and perhaps (but I much doubt this) by the physical influence of the seasons on the bodies of criminals. It has been however stated, that the temperature of the air, the quantity of moisture or drought, the various electrical conditions of the atmosphere, &c., influence our bodies, and through them react on our minds, and that this concurring with immoral influences renders us less capable of resisting the tendency to commit crimes of a particular description. It has been also asserted that these crimes vary with the season of the year, the offences against property being most common in winter and spring, those against life in summer and autumn. It is quite plain that this may be considered in various points of view. Thus we can easily conceive that the long winter nights will give a facility to the operations of

* N.B.—This table is not Madden's, but is given by the Reviewer.

the thief and robber which they do not enjoy in summer, and therefore it is natural to expect that offences against property will be more numerous in the winter season.

While on this subject I may observe, that there are a great number of curious facts with regard to one of the greatest of crimes, suicide. If we look here for the influence of season, it would appear that the greater number of suicides occur in summer. Thus, in that part of London, called the City of Westminster, the average for many years shows that the number of suicides in November is one-third less than in June. In France, also, November, December, January, and February fall greatly below the other months of the year as to the proportion of suicides. With regard to this crime it is strange but nevertheless true, that where moral and religious education is neglected the number of persons who kill themselves is increased in proportion to the extent of civilisation.

Among the capital cities in Europe, Dublin and Naples are those in which the fewest suicides occur; on the other hand, Paris and Berlin are remarkable for the number of persons who destroy themselves. In Spain the proportion is very small, and the same thing may be said of many other nations both in the old and new world. From the habit our English neighbours have of publishing every occurrence in the newspapers, they have earned for themselves the reputation of being the most suicidal nation in Europe. English spleen and English suicides are a common topic of conversation on the Continent, and it is believed that the combined effects of fog, spleen, and a melancholic temperament, prove so irksome to John Bull, that he makes away with himself in despair. This, however, is a false supposition. Later and more accurate returns have proved, that the English are not half so prone to self-destruction as their more mercurial French neighbours, and it is probable that there are five times as many suicides annually in Paris as there are in London. In Paris they wisely conceal those things from the public, in London they publish every thing. Murders, suicides, and other revolting crimes are detailed in the newspapers with an elaborate and disgusting minuteness, and pictures of human guilt in all the glaring deformity of circumstantial detail and heightened colouring are exhibited day after day to gratify the morbid taste of a prurient and culpable curiosity. I need not tell you, gentlemen, that this is unwise, unphilosophical, and pernicious in its effects. There is a principle of imitation in the human breast, deeply blended with our natures, and given for a good purpose, though it is but too often perverted. It prompts us to imitate what is great, noble, and useful, but sometimes it inclines us to copy what is bad, and there can be no doubt that murders and suicides have been committed by hearing or reading accounts of them in the public prints. It is not that the mind of the reader is captivated by the

account of a murder or suicide. But men of weak minds will sometimes, on reading a vivid description of self-destruction, get a strong and fixed idea into their heads, this idea becomes daily more and more impressed on the mind, so that they can think of nothing else, and when we add to this fixedness of idea the ordinary tendency of thought which is to impel to action, we arrive at an explanation of the fact, that the propensity to commit suicide may and does sometimes originate in imitation. Thus, after the death of the late Lord Castlereagh, it was remarked that several persons destroyed themselves in the same way. For the same reason it appears injudicious to give too particular and circumstantial details concerning the last illness and death of persons who have been objects of great public interest. The impression thus made on the minds of persons, who either are, or believe themselves to be, similarly affected, often leads to the worst effects, as was exemplified by the great mortality among lying-in ladies which was observed after the death of the Princess Charlotte. A very remarkable case of this description occurred while I was at Hamburg. My friend, Dr. Oppenheim, was called out one day to visit a man, who had cut his throat. The carotids escaped, but the injury inflicted was so great that the patient died after protracted sufferings. His body was given to Dr. Oppenheim for dissection. The man, who took care of the place, happened to be in the room at the time, and Dr. Oppenheim said to him in a joking way, "John, have you any fancy to cut your throat? If you have, don't do it in such a bungling way as this man, a little more to the left here and you will cut the carotid artery." The individual, to whom this observation was made, was a very sober steady man, with a family and a comfortable subsistence, he never manifested the slightest tendency to suicide, and had no motive to commit it. Yet strange to say, the sight of the corpse of a suicide, and an observation uttered in jest, made a powerful impression on him; the idea of self-destruction seized upon his mind, and about an hour after Dr. Oppenheim left the dissecting room he was horrified at hearing that John had cut his throat. Fortunately he had not profited by the anatomical instructions given to him, he did not cut the carotid, and consequently recovered.

Most of you, I believe, remember the extraordinary history of suicides at the *Hôtel des Invalides* at Paris. In this institution there was a long dark corridor, with a projecting beam, or post, at the darker end of it. It was a place well adapted for the purposes of suicide, and accordingly one of the pensioners came there one day and hanged himself. In the course of a few days six or seven others did the same. This caused an extraordinary sensation; the like had never been heard of before; the inmates were comfortable and happy, and the crime of self-destruction almost unknown among them. The post was removed, and a window broken open at the end of the

corridor, the peculiar associations of the place were thus dissipated, and there were no more suicides.

I could bring forward many other facts to show that the propensity to commit suicide is encouraged, not only by imitation but also by other causes. It would appear, that industrious and prudent people, who have a regard for their families and are anxious to provide for them, very seldom commit suicide. Accordingly we find, that, out of 120,000, who insured their lives in the Equitable Insurance Office, the number of suicides in twenty years was only fifteen.

The causes of suicide are frequently difficult of explanation. It has been attributed to climate, temperament, education, political and private condition, and many other circumstances. It is a curious fact, that the Irish are the least suicidal nation in Europe. The two cities, in which the fewest suicides occur, are Dublin and Naples. And it is remarkable, that in both these cities the bulk of the population resemble each other very closely. Between our poor citizens and the Neapolitan Lazzaroni there are many points of resemblance; the same bodily vigour, the same patient endurance of hardship, the same buoyancy of spirits and quaint humour, the same carelessness of the future, and, I am sorry to add, the same poverty are remarkable in both. Still they never dream of self-destruction. An Irishman has sometimes very little compunction in knocking his better dressed neighbour on the head, but he never thinks of killing himself. We have forty murders for one committed in Prussia, and they have forty suicides for one committed in Ireland. This calculation I made about ten years ago, and it was the result of much investigation. Both nations have since materially changed. Fewer Prussians, in proportion, are now killed by themselves, and many more Irishmen are now killed by others*. This is a curious subject and well worthy of the attention of the philosopher and legislator.

With regard to the connexion between education and crime I shall be necessarily brief, as I am anxious to proceed to the subject of temperaments. In France, it appeared before the Court of Assize, in the year 1832, that of the accused 4,540 could neither read nor write, 2,192 could do so imperfectly, 682 could read and write well, and 151 were educated in a superior manner.

In speaking of longevity yesterday I forgot to mention a curious instance which occurred in my own family. The Rev. Dr. Graves, of Templemore, died the year before the last at the age of 84. During the years 1758 and 1759 he lived in the house of his great grandmother's brother, John Newell, who was high sheriff of the county of Limerick in 1712.

* If official statements are to be relied on, the increase of murders in Ireland has been progressive since the *penultimate* rebellion.

Mr. Newell lived at Anglesborough, on part of Lord Kingston's estate, in the county of Limerick. He was nearly 50 years old at the Battle of the Boyne, where he served in King William's army. He died about the year 1760, aged 127. In this instance I had an opportunity of witnessing how far back a few links in the chain of traditional testimony may occasionally carry us, as I have heard at my own table anecdotes of the Battle of the Boyne, told by a person who had heard them from one actually present at that battle.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XVIII.

Partus ante justum Terminum.

GENTLEMEN,—You will recollect that, when speaking of applying the ligature in cases of polypos uteri, I regretted not being able to show you the instrument, which has been lately invented by Baron Graefe, of Berlin, for this purpose. I here show it to you, and consider it one of the most elegant and perfect specimens of ligature apparatus which has ever been invented*.

I now come to the subject of *partus ante justum terminum*, or *premature expulsion of the fœtus*, a subject of great practical importance to the practitioner.

Although the natural term of utero-gestation be forty weeks, or ten lunar months, yet it not unfrequently happens that the uterus expels its contents long before the expiration of this period, hence the *partus ante justum terminum* requires to be considered before coming to the subject of natural labour. To simplify it as much as possible I shall divide it into three species, viz. *abortion*, *miscarriage*, and *premature labour*. Under the head of abortion have been classed all those cases of premature expulsion of the fœtus, which occur before the sixteenth week of pregnancy, after this period they are called miscarriages, and retain this denomination until the twenty-eighth week, or seventh lunar month, from which time until the end of pregnancy they receive the name of premature labours.

Although a fœtus may be born, and show distinct signs of life at a very early period, it

* It would be needless entering into a minute description of this beautiful little instrument without the necessary illustrations, more especially as Mr. Weiss, junior, has published a translation of the original paper, in which Graefe first described it, together with several engravings.

is nevertheless unable to prolong its existence, beyond a few hours, until the commencement of the last division, or, in other words, until the twenty-eighth week of pregnancy, after which time, although extremely delicate, it may, with care, be reared.

It is not less important to bear in mind the distinction between abortion and miscarriage than between miscarriage and premature labour, not so much with regard to the fœtus (for that can never be preserved if born during the two first divisions of premature expulsion), but in order that we may be better able to form a correct idea of the degree of danger to which the mother is exposed. *Abortion* is the most frequent, and fortunately also the least dangerous, form of premature expulsion of the fœtus; thus, for instance, Dr. Hamilton says, "women mostly miscarry between the eighth and twelfth weeks," and Carus observes, that "abortions are safest for the mother during the first eight weeks of pregnancy, on account of the inconsiderable development of the ovum, whereas, in the later months, they disturb the health much more." Nevertheless Smellie considers them as seldom dangerous before the fifth month of pregnancy, when they would come under the denomination of *miscarriages*. The liability to abortion is greater in the earlier than in the later stages of pregnancy, for, as the union between the decidua and chorion is not well confirmed, as the attachment of the decidua to the internal surface of the uterus is proportionately slight, and as the extent of surface, which the ovum now presents, is very small to that which it offers in the more advanced state of pregnancy, and as it can of course be affected by smaller causes, it will be seen that a separation will be more easily induced, and prove much more injurious to the well being of the embryo than a large one at another stage †.

The uterus may be excited to expel its contents before the proper term of pregnancy from many causes, it may arise from deficient nourishment of the fœtus, and thereby its death; this may be caused by local, febrile, and chronic diseases, debilitating evacuations, depressing passions of the mind, &c. You will recollect, gentlemen, I mentioned to you a variety of symptoms, which are said to denote the child's death in utero; a sudden shivering, general sensation of uneasiness, loss of appetite, bad taste in the mouth, sensation of weight and coldness in the abdomen, flaccidity of the breasts, relaxation of the portio vaginalis uteri, discharge of a fœtid blood-coloured mucus; but as I have already told you, when speaking of this subject at my last lecture, the chief symptom to be depended upon, is the sensation of the rolling about of some heavy body in the abdomen as the patient turns from side to side; the moment the fœtus ceases to exist it acts upon the uterus like any other

foreign body, and excites it to contract and induce expulsion; the interval, however, between the death and expulsion of the fœtus varies exceedingly; when small it does not produce much irritation, and may be retained in the uterus for some time, and my friend, Mr. Crosse, of Norwich, informed me of an interesting case, where the fœtus was not expelled until four months after its death; this, however, does not occur when the fœtus is older, and has attained a greater size, being then usually expelled much sooner, for, as Smellie observes, miscarriage ensues from the membranes, after the child's death, running gradually into putrefaction, and thus, not being able to bear the pressure of the uterus, they burst. Premature expulsion of the contents of the womb may arise from external violence, producing separation of part or the whole of the ovum from the uterus; thus we see it frequently caused by blows, falls, and violent exertions, by the patient lifting heavy weights, and otherwise straining herself; we frequently see it produced by attempts to reach any thing high above the head; thus, in the lower ranks, where the patient has tried to take any thing off a high shelf, or, in the upper classes, where she has endeavoured to dress her own hair; perhaps nothing will produce it sooner than the sudden and half involuntary start of the muscles in attempting to save herself from falling when she has stumbled or tripped, although she does not fall, or even strike herself against anything, still she will almost instantly feel aware of some injury having taken place in the uterus, from the sudden violent motion of the child, which, after a little time, will cease altogether, and also, in all probability, from the appearance of hæmorrhage.

It may also arise without the previous death of the child, from affections of the mind, as sudden fright, violent anger, or grief, &c. An inflammatory action in the lower part of the intestinal canal, more especially a dysenteric affection, or a similar state produced by the improper use of irritants and stimuli, such as savine, aloe, and other drastic purgatives, will also induce contractions of the uterus.

Premature expulsion of the ovum may arise from internal causes, and when this is the case, it mostly happens at what, in the unimpregnated state, would have been a menstrual period.

General plethora is a frequent predisposing cause of abortion, for, occurring in conjunction with the increased vascular action, which takes place at this time in the uterine system, it produces, as it were, an apoplectic state of the uterine sinuses which form the internal part of the placenta; hence hæmorrhage results: this, however, of itself, does not induce uterine contractions, but acts indirectly, by causing the child's death.

Spasmodic affections not unfrequently act as causes of abortion; thus, for instance, palpitation of the heart, which is occasionally troublesome in the earlier months, is apt to

* Dewees.

excite abortion *. Cough, if severe, will have the same effect. Violent toothach has been known to produce it. According to Mr. Burns, the gravid uterus at various periods is liable to be affected with spasm, by which the ovum is almost always expelled. But the most frequent cause of all, is the enjoyment of too much connubial intercourse during the first three months of pregnancy. In the latter half of pregnancy, this cause of course does not exist, although she remains as liable to the action of the other causes of abortion as before. It is a well-known fact, that abortion is much more frequent with females of high rank than those of the middling and lower classes. According to Professor Naegele's experience, one-fifth, or even a fourth, of women in high life suffer abortion during their first pregnancy; this is easily accounted for by the luxurious and inactive life they lead, from the use of indigestible and stimulant food, taken too largely in proportion to the quantity of exercise, from keeping late hours, tight dressing, &c. The same causes which, in the unimpregnated state, produce a faulty condition of the menstruation and other disorders of the uterine system, now act as so many causes of abortion.

The sudden cessation of the breeding symptoms, with sense of weight and coldness in the lower part of the belly, with flaccid breasts, pain in the back and loins, and discharge of blood from the uterus, are pretty sure signs of abortion; hence we may define abortion to be "separation of the ovum with contraction of the uterus." According to Mr. Burns, when the ovum has not descended into the uterus, hæmorrhage occurs without contraction of the uterus, and therefore without pain; in fact, merely the symptoms of menorrhagia. When, however, the ovum has acquired the size of a nut, contractions of the uterus with pain in the loins, and hæmorrhage, will follow. "*Where uterine pain precedes or accompanies the discharge, expulsion cannot be prevented, but where the discharge precedes the pain, if the child be alive, it frequently may* †." On the other hand, Puzos declares that neither pain nor hæmorrhage necessarily produce abortion.

* Burns.

† Burns. This fact has been confirmed by my friend Mr. Ingleby, of Birmingham, in a valuable paper entitled "Illustrations of Midwifery," and published in the *Dublin Medical Journal*, Jan. 1835.—"A protracted hæmorrhage," says this experienced practitioner, "may not necessarily destroy the fœtus, or terminate in abortion, notwithstanding the well-known tendency. As a striking illustration, a lady, whom I recently attended in her confinement, had an unceasing hæmorrhage during the first three months of pregnancy, and yet abortion did not happen, and she was delivered at the full term of a living child."

When a considerable separation takes place, as must be the case when it commences at the upper parts of the uterus, pain will more likely occur than when it happens near the neck; hence, we sometimes have pain before the blood issues externally. The uterus, in this instance, suffers irritation from partial distension, from the blood insinuating itself behind the ovum; contraction ensues; the blood is forced downwards, and is thus made to separate the attachment between the ovum and uterus in its course, until it finally gains an outlet at the os tinæ. In consequence of the uterus being excited to contraction, the friendly coagula which may have formed from time to time are driven away, and the bleeding each time is renewed, and accompanied most probably with increased separation of the ovum, until at length, from its extent, the ovum becomes almost an extraneous body, and is finally cast off; hence separation at or near the os uteri will not be so dangerous, and in all probability there will be hæmorrhage without pain, which is the contrary when it takes place near the fundus.

With regard to the *treatment*, gentlemen, you must be, in a great measure, guided by the constitution and strength of the individual. On the appearance of hæmorrhage, if the system be plethoric, venesection will be advisable, but in weakly habits it will be improper, for, as Mr. Burns observes, the fulness and strength of the pulse sink much sooner in abortion than by mere loss of blood. In every premature labour, especially in the first stage, we must prevent all exertion, refrain from stimulants, and preserve the horizontal posture. Rest is absolutely necessary; the patient should be kept in a state of perfect quiet both of body and mind; she should lie upon a hard mattress; her clothing should be light, and the air of the apartment kept as cool and fresh as possible. By a timely venesection, where there is plethora, much distress may be avoided, and, having premised this depletion, opiates will prove of the greatest service. In weakly habits, and in every instance where the hæmorrhage does not depend upon plethora, a full dose of laudanum will produce the happiest effects. The application of cloths dipped in cold water to the back and vulva, sponging the legs, arms, and even the trunk, are very beneficial: in the first attack this cooling plan is to be used in all its vigour, and we must not quit our patient for an instant *. Smellie, in cases of flooding, gave twenty drops of laudanum, and repeated five or ten more in half an hour, applying cloths dipped in vinegar to the pudenda. If the hæmorrhage become at all profuse, it is a sign that considerable separation of the placenta has been produced; and when this is the case, as we can have no reason to suppose that reunion will take place, all hopes of preventing ex-

* Burns.

pulsion must be relinquished, and our sole attention directed to assist the uterus in evacuating its contents. But, although this is the only means by which a certain as well as permanent cessation of the hæmorrhage can be obtained, there are several changes which must take place in the uterus before this process can be effected, requiring more or less time; the ovum must be completely separated from its attachments with the uterus, and the contractions of that organ must have been of sufficient strength and duration to produce such a dilatation of its mouth and neck as to allow the ovum to pass; but, before this can be effected, such a quantity of blood may have been lost as greatly to endanger the life of the patient. Hence we must use such means of treatment as will stop the hæmorrhage, and also give the os uteri time to dilate sufficiently. The most effectual means is the *tampon* or *plug*; this was recommended so long ago as 1752 by Dr. Smellie, since which it has been noticed and highly approved of in a valuable work on Uterine Hæmorrhage by M. Leroux, of Dijon. The application of it has been variously directed. Dr. Smellie recommends the vagina to be filled with tow or linen rag dipped in any cold astringent liquid, while Mr. Burns advises plugging the vagina with a large piece of linen dipped in oil, and says that he has enclosed a piece of ice in the plug with the best effects; but I prefer the tampon used by Dr. Dewees, of Philadelphia, which is merely a piece of soft sponge of sufficient size to fill the vagina; this should be wrung out of pretty sharp vinegar, and then introduced. Dr. Dewees considers that the sponge tampon promotes the coagulation of the blood more quickly than any substance hitherto employed, from its numerous cells quickly giving passage to the finer parts of the blood. The sponge is much more easily introduced into the vagina, and, when introduced, produces much less irritation than the plug recommended by Mr. Burns. If, however, the flooding has not been very alarming, the action of cold applied externally will generally be sufficient to induce such a degree of coagulation as to close the mouths of the bleeding vessels sufficiently until expulsion has taken place. In severe cases, as long as the os uteri is firm and unyielding, as long as it has no tendency to dilate, or the uterus itself to contract, we may safely trust to the plug, rest, and cold.

Dr. Dewees, in his valuable compendious System of Midwifery, has highly recommended the internal use of the acetate of lead, given in small and frequently repeated doses. "We know," says he, "that the acetate of lead sometimes produce the most decided effects, let the mode of its doing so be what it may; for, in many cases, it seems to exert a control over the bleeding vessels as prompt as the ergot of rye does upon the uterine fibre." If the patient has suffered much from hæmorrhage, if the action of the uterus be weak, we

must deliver, and this, after one or two attacks of syncope, is not difficult, for the uterus suffers dilatation, and the os uteri becomes dilatable; but this must not be considered as a rule, for syncope is dangerous, and must not be waited for. In such cases vomiting occurs, and may do mischief by displacing clots already formed. But it sometimes seems to excite contractions of the uterus, and give it a disposition to empty itself. In such cases, a cloth dipped in tinct. opii and camphorated spirits of wine, and applied to the epigastrium, will produce relief*. We should also be careful to examine the blood upon the napkins of the patient, for the ovum may be expelled and thrown away with the coagula without our being aware of it.

Where there is every reason to suppose that the ovum is nearly or entirely separated from its connexions with the uterus, and where the os uteri is very little dilated, more especially where a portion of the ovum or placenta protrudes at the os uteri, Dr. Dewees has used a small wire crotchet with very good effect. Levret, who was aware of the same difficulty, recommended its being left to nature, although at the same time he observes, that injections of tepid water sent up in a powerful stream into the vagina are often useful. The larger the body to be expelled is, the more powerfully and effectually does the uterus contract; hence we ought never in the first three or four months to pierce the membranes in hopes of accelerating the expulsion, for the very reverse happens: the waters run out, and the fœtus, after a continuation of the bleeding, at last escapes, but the placenta and membranes remain. From the diminution of bulk, the uterus cannot expel them so soon as if we had not interfered; the disease is therefore longer protracted, more blood is lost, and a greater injury done to the system than if the woman had been let alone. In the latter months of pregnancy, however, the case is different, for then the quantity of blood effused is sometimes such as to make it necessary to produce a diminished size of the uterus and its vessels. At this time the size of the fœtus keeps up the action of the uterus after the escape of the waters, and excites its own expulsion †. Nature appears to attend to this point in a very striking manner, for it is as rare to see the fœtus precede the exit of its involucri *before* the third month, as to see it come enveloped in them *after* the fourth. Burton has given a very instructive case of habitual abortion cured by the judicious use of the lancet, &c., for it shows how carefully you must attend to the constitution and habit of the individual, and how completely by this must your practice be modified. A woman, having miscarried seven times, sent for him to attend her under symptoms of threatened abortion, which shortly after took place. "She was a healthy but not robust woman, her complexion rather

* Burns.

† Ibid.

pale and fair, and her arteries small, with a feeble pulse even in her best state of health. Some time after this, she sent for me, not having had her menses at the usual time. Her pulse was then feeble, and she had not the usual uneasiness from the obstruction, or yet any symptoms that usually attended the eruption of the menses. About a week before the time the menses should appear again, she began to have complaints that used to precede their eruption, wherefore I ordered ℥vj. only of blood to be taken from the arm, and gave her a gentle opiate at night. This I repeated in six days, she still going on with the use of gentle corroborants and stomachics. The week before the third month I ordered about four or five more ounces of blood to be taken, and the third or fourth day after to take ℥iv. more, and again on the fourth day to be repeated, and each night after bleeding she took the opiate, so that in about nine days she lost from twelve to thirteen ounces of blood. The week before the fourth month she lost ℥iv. more from the arm, she still continuing the medicines as prescribed till she entered the sixth month of pregnancy without any other bleeding, and then went on to her full time, and brought forth a living child. After the first miscarriage she had been bled every time she was pregnant, but then they took ℥xij. at a time, without considering that her feeble pulse would not bear the loss of such a quantity."

With regard to *the prophylactic treatment*, a peculiar diet for a female during pregnancy is by no means necessary, nevertheless it behoves her to be upon her guard against any causes which may excite a disposition to abortion, hence she must carefully avoid every thing which may affect the circulation, as affections of the mind, heating food, violent exercise, constipation, and the various other causes which I have just enumerated. Nothing can be more mistaken than the notion of its being necessary to take an extra quantity of nourishment during pregnancy for the support of the child as well as of the mother. Nature contradicts it in the most striking manner, for by the nausea and sickness with which most women are troubled during the first half of their pregnancy, she raises an effectual obstacle to any error of this kind. "It certainly cannot be intended (says Dr. Dewees) for any other purpose, since it is not only almost universal, but highly important when it occurs, as it would seem to add much to the security of the fœtus, for it is a remark as familiar as it is well grounded, that very sick women rarely miscarry, while, on the contrary, women of very full habits are disposed to abortion, if exempt from this severe but, as it would seem, important process." If she has already had an abortion in a former pregnancy, these precautions should be enforced with double vigilance, for the uterus soon acquires, as it were, a habit of retaining its contents only to a certain period, and then pre-

maturely expelling them; when this is once the case, it becomes exceedingly difficult, and is often actually impossible, to make it carry the ovum to the full term of utero-gestation, and despite of the greatest care the symptoms of abortion will come on at nearly the same time at which they occurred in former pregnancies, and frequently to the very week. In such cases, if the patient be plethoric, she should use exercise, the cold bath, anti-phlogistic regimen, and occasional venesection.

"We might often prevent abortion," says Baudelocque, "if we were perfectly acquainted with its cause, even when the labour is already begun. A very plethoric woman felt the pains of childbirth towards the seventh month of her pregnancy, and the labour was very far advanced, when I was called to her assistance, since the os uteri was then larger than half-a-crown; two little bleedings restored a calm so much, that the next day the orifice in question was closed again, and the woman went the usual time. Food of easy digestion, prudently administered, quieted a labour not less advanced in another woman, where it was suspected to be the consequence of a total privation of every species of nourishment for several successive days; delivery did not take place till two months and a half afterwards, and at the full time; emollient glysters and a very gentle cathartic procured the same advantage to a third woman, in whom the labour pains came on between the fifth and seventh months of pregnancy after a colic of several days' continuance, accompanied with a diarrhœa and tenesmus, &c."

Swelling of the breasts occurs sometimes in the earlier months of pregnancy, so as to produce much pain and fever; besides the inconvenience to the mother, it causes considerable determination of blood from the uterus, depriving the fœtus of much nourishment, and thus tending to produce abortion; among other bad effects which tight lacing produces, is that it injures the proper development of the nipples during pregnancy. In such cases, you will find benefit by putting thick ivory rings over each nipple, so as to defend it from the pressure of the dress, and thus allow it to attain its proper size. Where there are no symptoms of plethora present, you must be careful to avoid lowering still further the strength of the patient, and here a mildly invigorating tonic plan of treatment must be had recourse to. "For a number of years," says Mr. White, of Manchester, "I have been convinced of the good effects of cold bathing not only in preventing miscarriages when every other method has been likely to fail, but other disorders which are incident to pregnant women, and generally attendant upon a weak, lax fibre. I dont mean the cold-bath in the greatest extreme, but such as that of Buxton or Matlock, or sea-bathing; or bathing in a tub in the patient's house with the water a little warmed. I have frequently

advised my patients to bathe every other day, at a time when the stomach is not overloaded, and not to stay at all in the water, to begin this process as early as possible, even before they have conceived, as there will be then no danger from the surprise, and continue it during the whole term of pregnancy; and several have bathed till within a few days of their delivery."

"We are warranted by long experience to declare that unless plethora produce some direct evidence of its mischievous tendencies, as headach, pain in the chest, or sense of fullness in the head upon stooping, giddiness, &c, the patient should not have recourse to bleeding without the express approbation of the physician. To women who are in the habit of miscarrying this proscription of indiscriminate bleeding is particularly important, especially as it is the remedy almost universally resorted to for its relief, than which, in many instances, nothing can be more preposterous or improper. We are justified in saying it has very often produced the evil it was intended to prevent*."

In cases of this sort, where there is much constitutional atony, our attention must be first directed to the state of the alimentary canal; the chylopoietic functions must be duly regulated, and, for this purpose the mildest laxatives, and gentle alterative medicines, must be exhibited; this being done, we may now gradually feel our way with tonics, as quinine and sulphuric acid, and, perhaps, even proceed to the use of chalybeates; the food should be nourishing but unirritating, and perfectly easy of digestion; she should live in a pure air, use moderate exercise, and keep early and regular hours.

Where, however, premature expulsion of the fœtus has become so habitual as to resist the various modes of treatment which I have recommended, the only remedy, which I know of, is strictly to avoid all sexual intercourse for twelve or fourteen months, or even longer. During this period, the uterus, from not being exposed to any excitement, become less irritable, and gradually loses the disposition it had acquired of expelling its contents prematurely, and I have known this plan to succeed in cases where the strictest attention to diet and regimen, and the most careful avoiding any cause which might excite uterine contraction, had failed. Although abortion or miscarriage may have repeatedly taken place, still we ought not to give up all hope of the patient being able to carry the fœtus to the full term of uterogestation. Dr. Young, of Edinburgh, in his lectures on midwifery, mentions a case where the patient actually miscarried thirteen times, and yet bore a child the fourteenth time. This, however, is very rare, and I do not quote it to show that premature expulsion may occur several times with impunity, far from it. "The consequences of repeated abortion," says

Dr. Dewees "are 1st, a bad state of leucorrhœa; 2nd, immoderate flow of the catamenia, attended very often by the expulsion of coagula, their returning too frequently, or that distressing condition of this discharge called dysmenorrhœa, or painful menstruation; 3rdly, dyspepsia, with all its terrible penalties; 4thly, schirri and cancers, besides many other evils of minor importance. The catalogue here exhibited is not the sportings of the imagination, it has but too real a foundation as every practitioner of experience can safely testify."

So much, gentlemen, for premature expulsion of the fœtus. You are aware that this is the subject for the best essay on which I have proposed to give the midwifery prize next spring, and having reason to know that several among you have determined to compete for it, I have purposely quoted, during the present lecture, most of the best authorities upon the subject, in order that you may be better acquainted with its literature. At our next meeting I shall commence the description of labour.

LECTURES

ON

FORENSIC MEDICINE,

DELIVERED BY

DR. HAY GRAHAM,

At the Westminster School of Medicine.

LECTURE XV.

Insanity, continued.

GENTLEMEN,—In my last lecture I enumerated the various species and symptoms of monomania, of mania, dementia, and congenital idiotism. It now remains to point out to you more particularly those diagnostic characters by which you may distinguish the disease when feigned, and detect it when concealed.

Ancient history, both sacred and profane, presents us with several illustrious examples of this disease being feigned. In our own day it is of frequent occurrence, in order to avoid the punishment due to premeditated guilt. If it thus becomes a matter of importance to detect the imposition when feigned, it is no less important to detect its presence when concealed. Hence your testimony may be frequently required both in civil and criminal cases; either to ascertain the presence of insanity on a commission *de lunatico inquirendo*, or on a disputed will, or on a criminal prosecution; and, as the court would feel itself bound to decide according to your testimony, it is highly incumbent on you to make yourselves acquainted with all the forms of insanity, so that you may be enabled to form a correct judgment, and deliver your evidence in a manner at once clear, concise, and convincing.

In ordinary cases, the points to which you should more particularly direct your attention are, first, the state of the mind, secondly, the

* Dewees on Children.

external appearances, and, thirdly, the history of the disease. There are two pathognomonic symptoms of the mind which are never feigned; during the period of remission, the really insane believes himself to be perfectly sound, and rather seeks to conceal his insanity than to render it more apparent: the impostor, on the other hand, asserts his madness and overacts his part. The most unerring symptom, which nature does not allow to be simulated, is that watchfulness or want of sleep which almost invariably accompanies insanity, and without producing any listless exhaustion or other usual effects. The countenance assumes an expression corresponding with that peculiar state of the mind which constitutes the insanity, and does not lose this expression when not observed; the actions, attitudes, and gestures, have also a corresponding relation to the mind. In nearly every case of insanity the previous history and invasion of the disease are sufficiently well marked and known as to leave no doubt respecting the part which is acted; but, if otherwise, the medical man ought to examine the individual and obtain from him a history of the disease, which, in all probability, would bring to light some circumstance that would at once detect the imposture. Mr. Hill makes mention of the peculiar odour observed in maniacs, with which the sheets and body linen are impregnated of such as sleep in a small badly-ventilated room, and which, to those acquainted with this peculiar smell, can scarcely ever be mistaken. Dr. Rush relates a case of suspected insanity in a man under sentence of death, and which had been declared to be feigned, but was subsequently ascertained really to exist by the increased frequency of the pulse, being twenty strokes in a minute more than it ought to have been in a healthy state of mind and body. In some forms of the disease there is great torpidity in the alimentary canal, and should a brisk purgative or powerful emetic fail to produce any effect, although their action would not prove the negative, yet the want of action, joined with other corroborating circumstances, might be considered as positive proof of the presence of the disease. Foderé, after enumerating the characteristic symptoms of mania, dementia, and monomania, observes, that a pretended madman answers insanely on every subject besides that on which he pretends to have lost his senses; he carefully avoids, on all occasions, to show the most feeble glimmering of reasoning, least his imposture should be discovered. If any speech is made in his presence, without his being sensible of the design, in which either a severe punishment is announced or a great benefit held out, he is not so completely master of himself as not to allow his emotion or feelings to become known or visible either by his words, his actions, or his countenance. Such unexpected communication of the destiny which awaits him, is, says Foderé, a touchstone that seldom fails.

Thus, a woman, who associated with a band

of highway robbers, frequently escaped from justice by pretending madness. Foderé, being ordered to visit her, was himself deceived, and on the point of declaring her insane; but remembering a case related by Zacchias of a physician who ordered an impostor to be soundly whipped, upon a principle, that, if the disease were real, it would be serviceable in producing a determination of the morbid humours towards the surface, and, if feigned, that it would detect the imposture, he turned back towards the door of the cell, and addressing the jailer in a firm tone of voice, said, "To-morrow I shall return; if she continues to scream and howl, and does not dress herself; if the chamber is not cleaned and put in order, you will have ready a red-hot iron to apply between her shoulders." These words produced the desired effect; the next day she was dressed, her room washed and arranged, and she had passed a quiet night. Foderé then examined her, and in the course of a fortnight fully detected the imposture, and made his report accordingly.

"The best mode," observes the editor of Dr. Bech, "that has yet been discovered for forcing a man who feigns madness to confess and desist, is by the use of the whirling chair, that is, a chair placed upon a spindle, which revolves upon its own axis, and is turned by a wheel or crank, with the rapidity of the fly of a jack: it produces nausea, even to syncope; and after two minutes of such discipline, few men can command spirits sufficient to act any part." It was by this means that Mc. Dougal, of Glasgow, was rendered sane when he feigned madness to avoid being tried for sinking ships, to defraud the underwriters. But he betrayed himself to the medical men by the common fault of impostors, not having "a method in his madness," but mixing up the two irreconcilable characters of

"The moping idiot, and the madman gay."

In the majority of cases there is no difficulty in distinguishing real insanity, yet there are some where it is difficult to form an opinion. First, for some individuals, who are considered sane, in many respects approach very nearly those who are insane; and secondly, on the other hand, many who are deranged preserve sufficient good sense to appear possessed of their understanding.

Under the first head may be considered, first, those whose understanding is weak and limited, having but little knowledge and an imperfect education, and who, on this account, may entertain an erroneous judgment, strange fancies, and ridiculous opinions; secondly, those half-witted people who have just sufficient judgment and discernment to enable them to conduct the ordinary affairs of life, but not duly to appreciate the motives which give rise to their actions and regulate their conduct; thirdly, those who have a superficial knowledge, are ever busy without well knowing what they are about, and are always

distracted without being able to fix their attention; who have a lively imagination, never at rest, but in a continual flutter of mobility; strange and singular ideas; a peculiar method of seeing every thing; and a mania for some particular thing—for dogs, or horses, or building; for collecting prints, purchasing rare paintings, or buying up old books, of which they make no use; hence the satirist—

“These learned men of books assume the care,
As eunuchs are the guardians of the fair;”

and other such like hobby-horses, whims and caprices. Fourthly, those who are enslaved by their passions, carried away by the impulse of feeling, violent, impetuous, and imperious; unable to endure contradiction or to resist their unbridled desires, neither possessing the light of reason nor the discipline of early education to controul or correct their passions; the ungovernable rage of these seems to be an innate feeling—to proceed from a sort of blind instinct rather than from any want of understanding. Fifthly, those lunatics who have been cured, but still retain some trace or taint of their disease, and continue susceptible, irritable, inattentive, and unsteady. Sixthly, such as are easily frightened, or alarmed, without reason, and always in a state of doubt, perplexity, and confusion. Seventhly, the longings of pregnant women, or the capricious desires of such as are nervous; that change of character which is produced by menstruation, or by a morbid state of the brain in hysteria or hypochondriasis, or by any other cause.

Under the second head may be included, first, those individuals on whom insanity makes such a slow and gradual progress, that, as it steals on them imperceptibly, they have been long labouring under the influence of the disease without having excited any suspicion. Thirdly, some cases of monomania, where the delusion is very limited, and the individual is capable of discerning the absurdity of his delusion, and can, therefore, conceal it. Thirdly, a slight degree of mania, where the mind is simply on the stretch with some enthusiasm; these are merely exalted, and talk a great deal without degenerating into absolute insanity. Fourthly, under this head may be ranged the first stage of primitive dementia, and the commencement of dotage, or the weakening of the intellect in old age. Fifthly, that species of monomania, not unfrequent with women, which consists almost entirely in a perversion of their sentiments towards their children, their husbands, their friends, or relations. Sixthly, where the insanity is dissembled, as may be observed in those who watch an opportunity to commit suicide, or those who have sufficient tact and judgment to recognise the object of an inquisition, or of those appointed to examine them. Seventhly, that insanity which is of short duration, such as is induced by drunkenness, or by epilepsy. Eighthly, the lucid intervals between the paroxysms of intermittent alienation.

In all these cases, touching the bounds of demarcation, it is difficult to ascertain the absence, or to deny the presence, of insanity. In respect of the passions, it is an old observation, that they give rise to temporary madness. “*Ira brevis furor;*” hence some authors have proposed as questions—1st. Whether a violent passion may not be considered as a fit or paroxysm of monomania? 2nd. Whether a predominant or exclusive passion may not excite for the time being, that is during its existence, a state of temporary derangement? In whatever way these questions may be decided, they cannot, in a moral point of view, remove the responsibility of the agent; for, being previously in a sane state, he ought to have exercised sufficient control not to have allowed his passions to be so highly excited; and such an apology for crime would not, in a court of justice, be of more avail than a plea of drunkenness, which is never admitted.

The celebrated Dr. Gall, the founder of the science of phrenology, in his work on the Functions of the Brain, relates many singular cases of insanity, especially of monomania, by way of establishing his doctrine; viz. that each convolution is a particular organ, and that each hemisphere is a perfect brain; as each eye is a perfect organ of vision, which can act either conjointly or independently of the other. Thus, should one of the hemispheres of the brain become incapable of performing its functions, the other may continue to act without any apparent diminution of intellectual capacity; or, should the functions of the one become partially deranged or suspended, those of the other may remain perfect and undisturbed.

Tiedemann mentions the case of one Joseph Moser, who was insane on one side of the brain, and perfectly sane on the other, and was hence capable of observing his own insanity. At Vienna, a minister of state laboured during three years under a similar disease. He heard some one continually talking and uttering abuse on his left side, so that he always turned his eyes to that side, notwithstanding he distinctly perceived with his right side that these sounds proceeded from a derangement on the left side of his head. When he was attacked with a fever, he was no longer able to resist this illusory impression; and long after he was cured, each time he committed an excess in drinking, or allowed himself to be highly excited by passion, he was sensible of a tendency to a relapse on this side of his head.

Dr. Gall relates several other cases in confirmation of the above. In addition to these he gives the case of a priest, who for some time was afflicted with erysipelas on the forehead, which frequently disappeared, and again broke out: he gradually became paralytic on the left side, and was at last seized with apoplexy, and died in the course of a few hours. Three days previously, he had preached a

sermon and followed his usual occupation as a schoolmaster, without his intellect being in the least affected. On opening the body, the right hemisphere of the brain was found disorganised, converted into a substance of a dirty yellowish white colour, and full of hard knotty points or tubercles, resembling grains of sand.

Cases of monomania, or partial derangement, where only one or more organs of the brain are diseased, are of extremely frequent occurrence, and to be met with in every lunatic asylum. Having, in my previous lecture, entered very fully into the symptoms of this form of insanity, it is not necessary to trouble you with many illustrations. The inimitable Cervantes has delighted the world with a most admirable, though fictitious, description of this species of madness, in his celebrated hero Don Quixote. Here the disease is painted in vivid colours, and under the simplest form, being confined to one object. The Don was an accomplished scholar, and a courteous gentleman; he could converse on every subject like one of the sages of Greece, except on deeds of arms and chivalry. The moment this subject was introduced, his whole thoughts took one particular bent. "Alas," exclaimed the knight of the sorrowful figure, "the days of chivalry are gone. The world has become degenerate; virtue is abashed, and vice stalks abroad with unblushing front; where now is Amadis de Gaul, and the Paladins of Charlo-man? Knight-errants no longer scour the earth to punish the vicious, reward the virtuous, and relieve the distressed damsels. It is for me to revive the long-forgotten profession of arms; to restore the lustre of the days of the Paladins; to punish wicked necromancers and hoary headed magicians, and to relieve distressed enchanted virgins." Thus thought, spoke, and acted the Don.

Many believe themselves inspired of heaven. The asylum at Hanwell at this moment contains a very ingenious, and, in other respects, sensible young woman, who, without having previously learnt the trade, has taught herself and other lunatics to plait straw, and manufacture bonnets, and, in all respects, is discreet and well conducted. Being unfortunately a follower of the Rev. Mr. Irving, she believes she has the gift of the unknown tongue, that the Holy Spirit resides within her, and uses her tongue as an instrument to utter its warnings to a sinful world. This idea has steadfastly taken possession of her mind; well acquainted with the sacred writings, she defends her insanity with much skill. In her the forehead is well formed; the organs of ideality and perception are largely developed.

In these cases of monomania, or partial derangement, we meet with such a mixture of reason and extravagance, of correct judgment and delusion, that it is often extremely difficult to ascertain the existence of the disease; and, as the patient is himself firmly persuaded of his sanity, a casual observer, and even those

appointed to visit and examine them officially, are frequently imposed upon by these deceptive appearances. Every work on mental alienation abounds with these cases. Pinel relates several; thus one monomaniac succeeded in persuading an officer of government appointed to visit the lunatic asylum, or "l'Hôpital de Bicêtre," that he was the victim of the grasping avarice and cruelty of his family, so that the officer, having examined his grounds of complaint, intended to set him at liberty. But, at the moment of departure, when saying farewell, that he should shortly return and communicate good news; "your excellency," replied the other, "will be always welcome, provided you do not come on a Saturday, for on that day the blessed Virgin pays me a visit." A commissioner whose duty it was to set at liberty those who were considered cured, having examined an old vine-dresser, and observing no incoherence in his answers, prepared a document, or "procès verbal," attesting his cure, which, as usual, was handed to him for signature. What was the surprise of the magistrate on seeing that he assumed the title of Christ, the Saviour of mankind, and gave himself up to all the reveries which this idea suggested. Thus a similar case of monomania is related by Lord Erskine, in his celebrated speech for James Hadfield. "I examined," said his Lordship, "for the greater part of a day, an unfortunate gentleman, who had indicted a most affectionate brother, together with the keeper of a mad-house at Hoxton, for having imprisoned him as a lunatic, whilst, according to his own evidence, he was in his perfect senses. I was, unfortunately, not instructed in what his lunacy consisted, although my instructions left me no doubt of the fact, but, not having the clue, he completely foiled me in every attempt to expose his infirmity. You may believe that I left no means unemployed which long experience dictated, but without the smallest effect. The day was wasted, and the prosecutor, by the most affecting history of his unmerited suffering, appeared to the judge and jury, and to a humane English audience, as the victim of the most wanton oppression; at last Dr. Sims came into court, who had been prevented by business from an earlier attendance. From him I soon learned that the very man, whom I had been above an hour examining, and with every possible effort which counsel are so much in the habit of exerting, believed himself to be the *Lord and Saviour of mankind*, not merely at the time of his confinement, which was alone necessary for my defence, but during the whole time he had been triumphing over every attempt to surprise him in the concealment of his disease. I then affected to lament the indecency of my ignorant examination, when he expressed his forgiveness, and said, with the utmost gravity and emphasis, in the face of the whole court, '*I am the Christ!*' and so the cause ended."

The monomania of religion frequently leads

to the most horrible crimes, under the persuasion of performing an acceptable service to the Deity, and, by saving their souls from perdition, conferring an inestimable benefit on their victims. Pinel mentions the case of a superstitious countryman, whose imagination being highly excited by the sermon of a missionary, believed himself doomed to the horrid and eternal punishment which awaits the damned, to be plunged into another Phlegethon, there, amidst sulphureous flames, to be tormented by fiends of horrid shapes, to linger for ever and ever, and, though immortal, to endure all the excruciating agony which "mortal flesh is heir to," though never to die yet to feel for ever dying. These horrid thoughts haunted his imagination, and he believed that, in imitation of our Saviour's sacrifice for the sins of the world, he could only rescue himself and his family from such a dreadful destiny by, what he termed, making them martyrs by the *baptism of blood*. In pursuance of this idea he first attempted to murder his wife, who with great difficulty escaped from him; he then infuriated raised his murderous arm against his two youngest children, and, with the barbarity of fanatic zeal, immolated them in order to procure eternal life. Delivered into the hands of justice, he murdered one of the prisoners confined in the same cell, considering it a meritorious work of expiation. His madness being proved he was condemned to be confined for life in the Lunatic Asylum of Bicêtre. The isolation of long solitary confinement, which invariably exalts the imagination, and the idea of having escaped from death, notwithstanding the sentence of the judges, aggravated his disease and increased the delusion, so that he believed himself to be invested with the attribute of the Deity, and was omnipotent, or, to use his own expression, that he was the fourth person of the Trinity; that he had received a special mission to save mankind by the baptism of blood, and that all the potentates of the earth combined could not take away his indestructible life. His derangement was partial, and limited to what was connected with religion, and he seemed, in every other respect, to enjoy the most perfect reason and use of his senses. This patient having passed above ten years in close confinement, and having preserved an appearance of calm tranquillity, was allowed to enjoy the liberty of the precincts of the hospital. Four additional years of probation had elapsed, sufficient to induce a belief in his cure, when suddenly these superstitious and sanguinary ideas again took possession of his mind. On the eve of Christmas he conceived the project of making an expiatory offering of all who should come in his way. Having furnished himself with a shoemaker's knife, he seized the moment when the guardian went his rounds, and stabbed him behind, the blow was fortunately turned aside by the ribs; he then cut the throats of two lunatics near him, and would

have continued his destructive course of homicide, had he not been speedily seized hold of, and the further consequence of his ungovernable and murderous rage thus put a stop to.

Dr. Gall relates the case of Koerper, the chief of those fanatics who attempted to found a new sect in religion. This man, whose countenance was calm, yet confident, and beaming with candour, declared that, from his earliest remembrance, religion took exclusive possession of his thoughts, he therefore sedulously applied himself to the study of the sacred writings, and of the commentators thereon; but the great variety of opinions amongst them convinced him this was not the right mode of discovering the true religion; he, therefore, renounced his studies and all further research, but betook himself to prayer, and fervently entreated the Deity, if not contrary to his immutable decrees, to reveal the truth. Having prayed for a long time, he one night saw his chamber filled with a brilliant light, as bright as that of several suns. In the midst of this dazzling burst of glory our Lord Jesus Christ appeared to him, and revealed the true religion. Koerper endeavoured to propagate his doctrines with an indefatigable zeal, which he considered obligatory upon him, and it was impossible to make him sensible that his mind had wandered in the midst of illusions. Perhaps if we were acquainted with the private history of the Rev. Mr. Irving, and the unknown tongue, some allusion similar to this might appear.

Pregnancy is rarely an exciting cause of insanity. M. Esquiroi quotes the case of a lady, who twice became mad on the first day of conception, but each time the disease lasted only a fortnight. Labour is frequently a predisposing cause of insanity; yet the disease seldom declares itself without some moral cause exerting its influence on the mind. Strange unnatural dreams, or longings, frequently accompany pregnancy. Gall relates the case of a lady, who, on seeing the naked arm of a baker, felt an irresistible desire to bite a piece out of it, a gratification her husband procured for her on paying an adequate sum of money to the baker to tear a little bit out of it. There is another account of a woman, who had a horrible longing to eat her husband; to gratify this unnatural desire she killed him, boiled and roasted a part, and salted the rest, and lived upon him for several months.

We sometimes meet with cases of intermittent insanity, where the disease is periodic. M. Pinel mentions one, in which the paroxysm lasted eight or ten days every month, producing a most complete change of character. During the lucid intervals this individual was calm, gentle, and reserved; his answers were diffident and full of propriety; he was distinguished by the urbanity of his manners, his strict sense of justice, and his willingness to oblige, and offered ardent prayers for his reco-

very; when the paroxysm returned his face became flushed, his eyes red, sparkling, and prominent; he felt a burning heat in his head, accompanied with great thirst; his step became quick and impatient; the tone of his voice hoarse and arrogant; and his look full of daring, and he experienced a violent desire to quarrel and fight with every one. Another lunatic, naturally mild and peaceable, during the period of exacerbation, seemed inspired by the demon of malice. The mischievous activity of his mind was never at rest; he would lock up his companions, beat, provoke, and excite them by every means to quarrel.

It is, in point of fact, extremely necessary not to confound, or mistake, any other species of insanity with that which is intermittent, and which alone can properly be said to have lucid intervals. For any act, committed during such intervals, is binding in law; for your better guidance I therefore give you the definition of a lucid interval, as eloquently described by Dr. Aguessan. "It must not be (says the Dr.) a superficial tranquillity, a shadow of repose, but, on the contrary, a profound tranquillity, a real repose; it must be not a mere ray of reason, which only makes its absence more apparent when it is gone; not a flash of lightning, which pierces through the darkness only to render it more gloomy and dismal; not a glimmering which unites the night to the day, but a perfect light, a lively and continued lustre, a full and entire day, interposed between the two separate nights, of the fury which precedes and which follows it. To use another image, it is not a deceitful and faithless stillness which follows, or forebodes a storm, but a sure and steadfast tranquillity for a time, a real calm, a perfect serenity; in fine, it must not be a mere diminution, a remission, of the complaint, but a kind of temporary cure, an intermission so clearly marked, as in every respect to resemble the restoration of health."

A lucid interval, says Harlam, is a complete recovery of the patient's intellects, ascertained by repeated examinations of his conversation, and by constant observation of his conduct for a time, sufficient to enable the superintendent to form a correct judgment.

Lord Thurlow defines it a perfect interval, not a cooler moment, an abatement of pain or violence, or of a higher state of torture, a mind relieved from excessive pressure, but an interval in which the mind, having thrown off the disease, had recovered its general habit.

Such is the definition of a lucid interval in civil cases, but, in criminal cases, it is of greater latitude. Sir Vicary Gibbs, at the trial of Bellingham for the murder of Mr. Percival, asserts, that a man may be deranged in his mind, his intellects may be insufficient to enable him to conduct the common affairs of life, disposing of his property, and have trustees appointed him, yet such a man is not discharged from his responsibility for criminal acts, *if he possess a mind capable of distin-*

guishing right from wrong. On the same trial, Lord Mansfield declared, that so long as lunatics could distinguish good from evil, so long would they be answerable for their conduct.—*Bech*, p. 246.

Thus, gentlemen, you perceive by these definitions, there are two kinds of lunatics in point of law; one, who, from aberration of mind, is not capable of managing his affairs, and another, who is not capable of distinguishing right from wrong. The one is not bound by the civil law, but still remains amenable to the criminal law, the other is not amenable to any law. Upon this principle Earl Ferrers, though certainly a lunatic, was condemned and executed for the murder of his steward, and upon the same principle was Bellingham condemned for the murder of Mr. Percival.

Having, since I last addressed you, visited the lunatic asylum at Hanwell, it is with a feeling of satisfaction I have it in my power to offer my testimony to the judicious and scientific method on which this institution is conducted. Dr. Ellis, the first medical officer or director of the establishment, has the merit of being the first who combined the moral with the physical treatment for diseases of the mind. It is clear, whatever may be the cause of any disease, in order to effect a cure it is first necessary to remove that cause, for it is an old maxim, "*causâ ablatâ, effectus tollitur.*" When the cause is of a moral nature, which by mental irritation has produced a physical disease, moral remedies must be administered, combined with such as are physical. Hence gentleness and persuasions combined with firmness, the "*suaviter in modo et fortiter in re,*" is the proper mode of administering relief "to a mind diseased" from blighted hopes, disappointed affections, the loss of friends and fortune, and all those numerous ills which beset the path of life. An entire stranger to Dr. Ellis, I know not what may be his pretensions to originality, or how far he may be indebted to others for his ideas, but this, gentlemen, I know, that humanity is greatly indebted to him for having introduced into this country a mild, scientific, and more efficacious method of treating these diseases of the mind, the most sad and humiliating to which our nature is subject. It is Dr. Ellis who has banished from the houses of refuge for the insane the whips, the scourges, and the chains, which once in effigy disgracefully ornamented the gates of Bethlehem. This philosopher, a physician in the truest sense of the word, following the indications of nature, has, by the most simple means, succeeded in the cure of a great number of lunatics too numerous to mention, whose cases, considered incurable, had for years baffled the skill of every medical treatment. The benevolent countenance and plain unaffected good sense of this gentleman reminded me of the Man of Ross, none of the pedantic affectation of learning, the arrogant assumption of superior merit, or the quackery

of science. His method is to allay the irritation of the mind by a mild and soothing treatment; no harshness is exercised even towards the most refractory; they are mildly but effectually prevented from either injuring themselves or others; no solitary confinement for any, where the mind, left without resources, preys upon itself, and feeds the disease; all that are capable of so being are engaged in active employments, which require no application of thought, and therefore relax the mind; the more robust are employed in the open air, the labours of the field, and such like occupations; those of a more delicate frame or feeble constitution remain in the house, where, in well ventilated and long corridors, heated by steam, they breathe a pure air, and enjoy a climate superior to that of Italy, a perpetual spring, such as poets describe; 'twas a luxury to walk along them, an artificial climate, such as not a nobleman of the land enjoys. Those in whom the disease is of a milder form, are, according to their sexes, classed together, whilst the more violent maniac and demented idiot, the dulness of the one acting as a sedative to the excitement of the other, and vice versa, thus producing a mutually beneficial effect, inhabit the same division of the building. Considering the nature of the inmates, a place "where folly holds her court," the greatest order and decorum prevail. All who have any glimmer of reason, are sensible that restraint is imposed upon them for their benefit, and not for their punishment, that they are treated as recoverable beings, and not as brutes or criminals. All seemed content and happy, as far as happiness and content are consistent with such a condition. Those who remain in the house, either from delicate health, a peculiar state of mind, or previous habits, and are capable of employment, are variously occupied. Workshops are fitted up for tailors and shoemakers; a long corridor forms a rope walk for the women, where they are actively employed in making twine, others plait straw, and manufacture bonnets, others are engaged in the domestic affairs of the establishment,—all are more or less occupied. Every operation of the more usual trades and all the business of the place are carried on by the inmates, under the discreet guidance of guardians. The master mind of Dr. Ellis is the moving principle, which conducts, directs, and puts all in motion. In a word, this receptacle of madness contains within its walls a well organised community.

The manifold advantages of such a system are obvious; constant employment diverts the attention, and leaves the mind in repose; the mild and equable temperature renders additional clothing unnecessary, even in the severity of winter; it also produces a determination towards the surface, and removes congestion, it promotes cutaneous excretion, and restores the equilibrium of circulation, and what is more, as the whole animal

system is a chain of sympathies, it promotes the healthy functions of every organ; and as the whole end and aim of medicine is to assist and correct nature, that is, to restore these functions, it greatly diminishes the need of pharmaceutical remedies. This is an immense advantage, giving the *vis medicatrix* of nature an opportunity of throwing off the disease, either by some salutary crisis of her own, or by a more slow and gradual operation, undisturbed by the blundering administration of ill-judged remedies, or the experimental attempts of vain theorists, more frequently aggravating the malady than effecting a cure.

Having given you this brief and imperfect account of the asylum at Hanwell, I shall now conclude this lecture and the subject of insanity with the plain, simple, and therefore philosophical, remarks of Dr. Ellis. "Every case of insanity," observed the Dr., "whatever may be its cause, whether moral or physical, is attended with inflammation of the white (or misnamed medullary) substance of the brain. On dissection, the vessels are, to a greater or less extent, invariably congested, according to the violence and extent of the inflammation. As the disease continues its march, greater or less disorganisation ensues; sometimes a part or the whole of the brain is reduced to a soft pulpaceous mass, at others it is firm and compact; the pia mater frequently adheres so strongly to the convolutions as to be separated with great difficulty; this increased vascularity extending to the periosteum additional osseous matter is secreted, the substance of the skull is thickened, the cellular structure of the diploe disappears, the sutures are no longer to be seen, and the whole assumes a degree of solidity resembling ivory. When the disease is of long standing, and the whole brain is involved in the organic lesion, and is no longer able to perform its functions, fatuity is the necessary consequence, and the excitement ceases, there being no longer any organ to excite. This, gentlemen, is the usual termination of chronic insanity, and thus the raving maniac, should death not put an earlier period to his existence, sinks into the tomb a dull unconscious idiot.

In delivering these remarks on the public asylum at Hanwell, without having received the sanction of Dr. Ellis, with whom I have no acquaintance beyond that of a stranger visiting the institution, I beg to observe, that if there are any misstatements, either in my account of the place or of the doctor's theory of mania, I alone am responsible for the errors or omissions which may be found. My hasty visit not having exceeded half an hour, I have not been able to give so full and perspicuous a description as I should have wished to have done, and as I hope at some future period to have it in my power to do.

Reviews.

An Exposition of the Nature, Treatment, and Prevention of Continued Fever. By DR. M'CORMAC. Pp. 202. Longman. 1835.

THE author commences his work with a truism, that "the importance of fever is very great," and he might have followed it up with another, that its nature is unknown.

From the father of physic up to the present period, during the space of above two thousand years, the subject of fever has afforded a theme for the disquisitions of many of the most eminent physicians during this long stream of time, and yet we know little more than did Hippocrates, and it may be thousands of years hence ere the essence of this disordered condition shall be revealed. Every thing yet respecting it is but conjecture; hypothesis has supplanted hypothesis. Doctrines the most improbable, nay, the most absurd, have been propounded and received by their contemporaries; wild speculations which have floated for a while, and which are recorded by tradition, have been successively subverted, affording but, it must be confessed, cold consolation to philosophers.

But we are now in an era of science, a bright era, it is said, yet, perhaps, no more luminous than when Galen lived, or when Nero reigned on the imperial throne.

All the efforts of ingenuity, and all the stores of philosophy unfold to us no more than that fever consists of an assemblage of phenomena,—symptoms sometimes following each other in regular succession, sometimes bursting forth spontaneously, and at others occurring in irregular order. We agree with Dr. Southwood Smith's hypothesis in the order in which the different systems of the body generally become affected in fever, but, in subscribing ourselves his proselytes, we are, nevertheless, of opinion that he extends his views further than facts or physiology will warrant. Our author *denies* Dr. Smith's positions, but does not *disprove* them. We are not bigoted to any philosophical sect or doctrine; we would receive the doctrine of Sir Richard Phillipps, and at once discard the Newtonian theory, if the former could be more satisfactorily demonstrated.

Dr. Smith thinks he proves his points satisfactorily, but the details require confirmation; we shall come to this anon. After some general observations on the fallacy of taking the effect for the cause, or the cause for the effect, of characterising a disease from the symptoms displayed in but one of its stages, we come to the following quotation from Dr. Smith, referring, however, more especially to the errors committed in neglecting the *common* symptoms of fever, and the *order* in which they manifest themselves. With respect to the order of appearance of the symptoms, he says that "our guide is *invariableness* of con-

currence. If we can ascertain that a certain number of events *invariably* takes place in every form and every degree of fever, these events will give us the particular phenomena which are common to all the varieties of the disease. If we can further ascertain that these events *invariably* concur in a certain order we shall have discovered what events bear to each other the relation of cause and effect."

Dr. M'Cormac is not a convert to these sentiments, we do not wish him; collision often elicits truth. He concludes, without adducing facts or solid arguments, that "it is, however, exceedingly difficult to affirm anything with certainty on this head, for sometimes these three classes of functions appear to be affected consentaneously, and not unfrequently they follow a different order from that here laid down; hence the difficulty of predicting any given series of symptoms." This is assertion, not proof. Here the author is speaking of typhus fever. It would be useless to present the symptoms which are narrated as characteristic of that disease, it will suffice to aver, that by the author's observations nothing new on this head has been elucidated.

With regard to the pathology of fever, three questions may be legitimately presented. 1st. Is fever the result of local inflammation in one or more organs of the body? 2dly. Is fever inflammation of the entire sanguineous system? 3rdly. Is it an affection *sui generis*? These are texts for an octavo!

Let us refer to these different propositions, *seriatim et singulatim*. Broussais, the distinguished French pathologist, referred fever to gastro-enteritis; he believed that here was the origin, here the invariable origin, and fever the consequence. Clutterbuck raises its seat to a more lofty elevation, he believes it to arise in the head. It may appear strange that organs so distant, and so dissimilar in their structure and vital properties, should have assigned to them identical morbid phenomena; but it is true they have. Each of these pathologists, with a host of others, denies the occurrence of *idiopathic fever*. We dissent *in toto* from their opinion. We are of opinion that the fire of fever may be lighted up in the system at large, be diffused over the whole frame, and concentrate its fury upon any local organ; at one time in the head, at another in the lungs, and at another on the mucous lining of the alimentary canal, so that fever shall accrue and exist for an indefinite period without any form or grade of inflammation having a being. With some of those sentiments Dr. M'Cormac is in accordance.

"Is fever inflammation of the entire sanguineous system?" The question could not assuredly be answered without previously entering into a long preamble of what is inflammation,—a question more easily proposed than answered. Fever certainly bears an analogy to inflammation; it is designated an excitement. Excitement of what?—Of the nervous and vascular systems; debility of the

muscular, (and perversion of the secretory, system.

"Is it an affection *sui generis*?" No one has answered the question. But let us leave the regions of physiology, and descend to perhaps really more useful domains, to a few opinions of the author. They shall be cursory. We think it may be established as a general rule, that fever, when once it is fully developed, cannot be arrested, it will pursue its path, but nevertheless its path may be shortened. Diet, air, medicine (of course), with an infinite and innumerable variety of other auxiliaries, can, fortunately for the practitioner, abate the violence of the disease and shorten its duration.

The author is a contagionist. He asks, "Why are not all fevers contagious?" And he shrewdly observes, "I can make no reply, except that all fevers may perhaps become so under certain conditions." The author is not, however, thoroughly satisfied about this point; he feels his incapability to untie the knot, more especially as Dr. Armstrong varied his opinion; he did not know the Doctor, or he would have known that no worse authority could have been quoted, and that the Doctor often changed his opinions.

On the pathology and on the morbid appearances after death the Doctor dwells at large; he endeavours, with great judgment, to lay down rules which may enable us to discriminate during life any individual organ which may be the seat of local disturbance in fever, such as inflammation, ulceration, &c. After referring to the brain and lungs, we are brought to the abdomen. The observations on the affections accruing in the latter cavity were exceedingly interesting. "The next," he says, at p. 103, "and very important complication of fever which I shall notice, is the abdominal. It is to be regretted that almost all the distinctive diagnostic tokens here are very uncertain. So long as the fever persists, abdominal complications are commonly associated with it; but it is very difficult to ascertain their kind. Neither the appearances of the tongue nor the sense of local pain, are any sure indices. It has been satisfactorily determined by Louis, Andral, and others, that the various conditions presented by the mucous membrane of the mouth and tongue depend as much upon the idiosyncrasies of the individual, as upon any connexion with any peculiar condition of the stomach or other portions of the intestinal canal. Hence the association of a red pointed tongue with the gastro-enteritis, supposed by Broussais to constitute an integral part of fever, is anything but correct. How often do we witness every variety in the aspect of the tongue, without being able to connect it with any serious affection of the digestive tube. Nor is it easy on the other hand to analyse the morbid signs presented by the whole frame, and refer them to the lesions which have produced them. The connexion of the appearances of the

tongue with the general issue of the disease, is much more certain and satisfactory. But, after all, what does it teach us? When the fever sets in, the tongue becomes red or white, then foul, hard, discoloured, chapped and dry; and, when convalescence begins, the tongue grows soft, moist and clean. The changes are concurrent, and we hardly see any alterations in the state of this organ, which precede the after phenomena of fever, so far as to foretell their issue. From the occasional softening, to the injection, inflammation, ulceration, and perforation, which may occur in the mucous membrane of the stomach, or any other portion of the intestinal tube, with the exception of the last-mentioned, we possess no certain sign, apart from the general state and progress of the patient. The existence of that affection of the mucous follicles called dothino-enteritis, is indicated by no individual sign, though many French pathologists maintain that typhus itself is the result, and, consequently, the presumed token of this lesion. The extensive ulcerations which occur in various portions of the mucous lining of the intestinal tube, are frequently unaccompanied with any uneasiness, even from pressure. Considerable pain upon pressure of the epigastrium or abdomen is, however, in general, justly considered a sign of the progress of internal mischief and organic change. But that such a token is very often illusory, will appear from the circumstances just mentioned; and the additional facts noticed by Andral and others, of the occasional excessive natural sensibility of the abdominal parietes, and also of the pain arising from pressure, owing to other causes, such as those cases in which blood is effused into the interstices of the abdominal muscular tissue. It has been determined by Alison, within the sphere of his own observation, that the pustular affection of the mucous follicles, and the ulceration, upon which so much stress is laid by French pathologists, are less frequent in Edinburgh, at least, than in Paris. In twenty cases which he examined, he only detected ulceration once. He looks upon it as more frequent in children. The researches of Bright and several others, nevertheless, show that these lesions occur sufficiently often, both in Britain and Ireland, to keep up the wakeful attention of the practitioner. Pain is generally an attendant on peritonitis from perforation and effusion, unless in extreme prostration, as well as in peritonitis from other causes; the latter occurrence, however, as well as the former, is rare in fever. The encouragement and swelling of the mesenteric glands, sometimes accompanied by purulent deposition, are indicated by no known sign; it is truly remarkable how these glands come to be so quickly affected in fever. A dysenteric or diarrhoeal discharge is said to point out an affection of the large intestines, and constipation one of the small; but, as every observer must remark, there is nothing constant in such indications. Diarrhoea, as

also vomiting, seldom occur except in early stages of fever; they are no certain accompaniments of organic abdominal changes. A diarrhoea sometimes precedes a sudden alteration for the worse, and sometimes it is the prelude to convalescence. It is more frequent than vomiting, but, from the common use of purgatives, it is not always easy to know the artificial from the natural evacuation. Certainly, when the discharge proves obstinate, and of longer continuance than usual, I would suspect an abdominal complication. We know that a kind of typhoid dysentery, or dysenteric typhus, is sometimes prevalent. As a general rule it may be here observed, once for all, that in the course of fever of low excitement, frequently called typhus, or when prostration sets in during the course of fever, the pain attending all inflammatory or other organic complications, is little or none."

With respect to the prognosis in fever, one of the most difficult and delusive points, the author assents to the almost universally recognised proposition, that *danger of the patient is in a ratio to the extent and violence of the structural and functional lesions.*

Early prostration is unfavourable. Inflammation occurring soon after the invasion of the disease, is less to be dreaded than when the health has become deteriorated by the continuance of the disease. "The occurrence," he says, "of thoracic inflammation is worse than abdominal, and cerebral than thoracic; the three united are, *à fortiori*, worst of all." The veriest casuist would concede to this latter conclusion.

The author divides the treatment of fever into three classes; first, those cases which are controllable by medicine, and which recover; secondly, those which terminate fatally; and, thirdly, those which run their course and terminate favourably without the aid of medicine, &c. The remedial agents to be employed in these various forms, and in an infinite variety of grades, must be modified by circumstances. If local inflammation arise, it must be combated by blood-letting, purgatives, blisters, &c. If in the brain, the scalp must be shaved; if there be heat in the head, cold applications must be applied. The latter point is one which we fear practitioners frequently fall into error in—it is, continuing the cold application even after the temperature of the scalp has been reduced to its natural standard, or even below it. It is a mischievous error. When the heat of the head is not above par, and the cerebral disturbance continues, a blister to the scalp may be judiciously applied. The cold must certainly be discontinued.

No matter where inflammation sets in, nor at what period or stage of the disease, it must be attacked, and, if possible, subdued. In the treatment, we perceive nothing original, save, perhaps, that *a lemon cut in two and applied to the burning temples affords relief.*

We have entered somewhat fully into Dr. McCormac's work on Fever. The author writes

from close personal observation of the disease in "three different quarters of the globe," and from experience in his own person. The book contains little philosophical or scientific inquiry. It gives an elaborate account of the various opinions entertained on the subject in ancient and modern times, and on the Continent, as well as in Ireland, respecting this dire and Protean malady. The remarks on the treatment are copious, but not less interesting. We have no doubt but that, as the author has produced a very favourable impression on our minds from the careful perusal of his work, many will be anxious to read it. It contains all we know or believe on fever; we strongly recommend it to our professional brethren.

On the Preparation and Medicinal Employment of Aconitine, by the Endermic Method, in the Treatment of Tic Douloureux and other Painful Affections. By A. TURNBULL, M.D. Pp. 48. Longman, 1834.

The author, in a work recently published *On the Endermic Use of Veratria and Delphinia*, hinted that aconitine might be discovered, and, if so, appropriated to medicinal purposes. After a laborious inquiry, the substance was detected. It being the opinion of Dr. T. that all other preparations of aconite were objectionable on account of their varying so much in strength, which they are found to do, and in consequence of the unpleasant, nay painful, effects of this agent, when internally administered, the Doctor prefers its external application, when such effects are not found to ensue. An account of the processes for preparing the active principle of the aconitum napellus may be interesting to our readers.

"A quantity of the fresh root of the aconitum napellus must be procured, and care should be taken that it be sound, and that the root be that of monkshood, for sometimes other roots are sold for it. Let it be carefully and cautiously dried, and then reduced to powder. This latter operation is not unattended by danger, especially if a part of the fine dust, which rises from it, be inhaled. One part by weight of the powder, and two parts by measure of strong alcohol are to be digested together in a gentle heat for seven days, and the tincture, while warm, is to be filtered. It is then to be reduced to the consistence of an extract by careful evaporation, at a low and well regulated temperature; the object of this is to prevent the destruction, or expulsion, of the active principle, which would very probably ensue, if the temperature employed were higher than barely sufficient to carry off the alcohol. To the extract thus prepared liquor ammonia is to be added, drop by drop, and mixed well with it, to precipitate the alkaloid; and, in this part of the process, care must be taken that too much be not added, as, in some instances, the product appears to have been decomposed by inattention to this circumstance.

It is difficult to give a precise rule as to the quantity, but enough will have been added, if the extract give out the odour of ammonia when stirred.

“The mass now consists of impure aconitine, mixed up with a quantity of extractive and other matters, soluble in water, and it may be taken up either with boiling alcohol or sulphuric acid, or the soluble matter may be removed by repeated washings with small quantities of cold water, which will leave the aconitine. This latter process is the one we have generally employed, and is performed by pouring a little water on the extract, and, mixing them carefully together, then allowing the undissolved part to subside, pouring off the fluid, and repeating the operation as long as any soluble matter is taken up; a quantity of light brown, or grey, powder is left, which may be purified by subsequent solution in alcohol. This powder contains the active properties of the aconite, in a high degree of concentration. A grain of it was dissolved in a drachm of alcohol, and twenty drops of the solution, put into the mouth of a Guinea-pig, occasioned death in a few minutes. Other experiments have been performed, all of which show the extreme energy of the substance.

“The second process consists in dissolving the alcoholic extract, prepared as before, without the addition of the ammonia, in as much cold water as will take it up, and carefully decanting the solution from the insoluble part, and then filtering it. To the filtered solution liquid ammonia is to be added, drop by drop, as long as it occasions any precipitation. When the precipitate has subsided, the supernatant fluid should be carefully poured away, or drawn off by means of a syphon; and, after the precipitate has been deprived of as much of the fluid as possible, it should be purified by a sufficient number of washings with small quantities of cold water, and then carefully dried. The product obtained by this process is white.”

In tic douloureux, and other nervous affections, and in gout and rheumatism this remedy has been employed.

An ointment is to be made, consisting of “*R. Aconitinæ gr. ij., alcohol. gtt. vj., tere optime et adde axung. ʒj., ut fiat unguent.*” The quantity of the aconitine is to be increased daily, but cautiously, to four, and even eight grains; the author has prescribed eight grains in a severe case of tic. A small portion of this ointment is to be rubbed over the painful part three or four times a day. The friction is to be continued until either the pain abates, or its common effects appear, viz. a sensation of heat, prickling, and feeling of constriction in the part. These sensations will sometimes last for hours. Dr. Turnbull has found this remedy serviceable in a number of cases. We notice one of tic in the portia dura and fifth pair of nerves, another of neuralgia of the left side, another of tic in the infra-orbitary nerve. Two

other cases are presented which occurred in the practice of Mr. Lyon, of Montague-street, and at the end of the treatise is a reprint of the cases reported in our Journal, Dec. 13th, 1834, taken from Dr. Roots's practice in St. Thomas's Hospital.

We have no doubt but that there lie hidden in the mechanism of the universe remedies for every disease, if we did but know where to find them.

Dr. Turnbull deserves well of his professional brethren for directing their attention to the medical agency of the ranunculus class of plants. Their chief action on a healthy person appears on the nervous system, a fair inference that it will be so in disease.

THE

London Medical and Surgical Journal.

Saturday, February 14, 1835.

THE COLLEGE OF PHYSICIANS.

It gives us great pleasure to be able to state from good authority, that the Government have held several conferences with the heads of the College of Physicians, the purport of which was the settlement of that portion of the question of reform in their antiquated institution which interferes with the giving of superior advantages to those gentlemen who have obtained collegiate degrees.

That the result of these consultations will be highly favourable to the medical world and to society in general, we think cannot be doubted, as any obstinate leaning on the side of the Fellows to the abuses which have so long disfigured their College cannot but be vain. The latest hour of their misrule is come, and their portals must be opened widely to admit the visitation they can no longer resist.

One of the proposals of the Government is, we believe, that the fellowship, the highest honour in the gift of the College, and too often the talisman of introduction to lucrative employment, shall not for the future be confined solely to those who have attained collegiate degrees, but that a plan, more just, appropriate, and liberal,

of admitting a certain mixed number of Licentiates yearly to that dignity, shall be adopted; thus successfully levelling one grand point of exclusiveness hitherto maintained, and infusing that snug coëterie, so sparing of their favours, with a more vigorous and liberal vitality.

With regard to the licentiate-ship, as the first step to future honour and emolument, it ought to be open to all possessing the requisite medical knowledge; and of course, to this end, the heads of the College would be allowed to frame such a scale of study to be gone through preliminarily as should be sufficient to enable the candidate to pass a searching but impartial examination, the *locus in quo* of study being disregarded. And this ordeal again should, if possible, combine both practice and theory, not merely the latter, as is the case at present. For this purpose a certain number of cases should be placed under the management of the candidate, and his capability of treating them noted by officers properly qualified and appointed for that purpose. The mere theoretic examination now undergone, every medical man knows to be no test of competence; and, since the College of Physicians will still remain possessed of extensive privileges, they ought to bestir themselves to become deserving of so much distinction, and add this desideratum in their form of examination, so much practised abroad, so easy of adoption, but so shamefully neglected here. In taking so much trouble upon themselves, they would join to the empty honours, which now create little else but jealousy toward their body, a degree of usefulness which should merit the respect and thanks of society; in other words, their stagnant waters would become a fertilising stream.

In this mode, then, by increasing the

number of admissions, and bestowing them annually on those most distinguished for professional eminence, looking at the solid attainments of the applicant for a licentiate-ship instead of cavilling about the spot where he might have obtained his information, a most beneficial amelioration in the highest branch of our profession would be achieved. No violence, no rasing of an ancient institution would be required, but only a gentle bending of its obliquity back into its natural straightness; in a word, an applying of the College to the purposes for which it was originally designed. And to suppose that the parties implicated in this change will be wrong-headed enough to reject so reasonable a quantum of reformation, would be to believe them so desperate as to defy public opinion, the verdict of their humbler brethren, and to invite those strokes from the scythe of destruction, which, by a timely taking of the pruning-hook into their own hands, might be easily avoided. So great a degree of madness entering into sane minds is not to be anticipated; we shall consider the question, therefore, so far settled.

Such an amount of reform, then, having been once conceded, on its coming into operation would gradually lead to the most desirable results. The accession of talent accruing to the *effete* and musty ranks of the reigning clique would sweep away for ever the list of absurd bye-laws, which renders them the scoff or hatred of the profession in general, would conciliate public and professional good will, and, finally, render the College of Physicians that palladium of public security against empiricism and the reckless daring of ignorance, for which it was first intended.

THE COLLEGE OF SURGEONS.

At the same time that the above salutary alterations take place in the College of Physicians, a similar but greater amount of improvement, without doubt, will be exhibited in that of the Surgeons. The close divan of the latter will assume less of a Turkish character, and its high and exclusive bye-laws, calculated for the meridian of Constantinople, undergo a change suited to the times and to public opinion.

THE ADULTERATION OF DRUGS.

THE jurisdiction of the Apothecaries' Company, if reform in the Colleges of Physicians and Surgeons be properly effected, is drawing to a close. Their rule, which never should have been extended to its present limit, will be curtailed. That society, originally formed for the sale of unadulterated spices and drugs, must revert to its ancient occupation, and leaving the examinations of medical candidates on the one hand, and their own personal aggrandisement on the other, confine their future labours to the less ostentatious employment of detecting fraud, in so far as concerned with their especial province, and vending wholesome, and, if possible, cheap drugs.

That their body, certainly a trading one, should ever have overleaped its plainly defined limits, and transgressed on those of science, will be matter of wonder to a more improved age, and, perhaps, may not be the fault so much of its own arrogance and avidity after gain, as of the inert and inefficient laws with which a science *they* were pleased to recognise as a kindred one was begirt. They made the best of the opening which avarice exhibited to their view, and pride spurred them on to enter those boundaries out of

which they are now about to be summarily, if not disgracefully, ejected. They and their Latin pedagogue (for, lacking the power of judging of a classical education by their own attainments, they employ such a personage) are about to disappear from the stage of their half trading, half scientific, lucubrations for ever. A more congenial duty will devolve on their worships than now engages their bewildered senses,—that of tasting and smelling sophisticated drugs, in order to condemn them, and thereby doing that service to the state which their sorry examinations in the sciences of anatomy and surgery cannot confer. The hue and cry is loud and long among medical practitioners, that their medicines are shamefully adulterated, and each asks the other, with a rueful face, if there be no remedy for so crying an evil. We presume to foretel that the government will assign this smelling and tasting task to its proper professors, the Masters, &c., of the Worshipful Company of Apothecaries. Their other and smuggled province they must resign. Peace and resignation be with them*!

* The sophistication of drugs in the shops of inferior apothecaries and druggists exceeds belief, and unless put an end to by a rigid scrutiny on the part of those who have the power, either the College of Physicians or Apothecaries' Hall, bids fair to neutralise the effect of any prescription offered. Rhubarb is almost uniformly more or less adulterated with turmeric, and jalap with one half linseed meal! Each petty apothecary has his own made compound called ext. coloc. comp. Their syrup of poppies is composed of treacle and opium, and their, ought to be, distilled waters made with lump sugar, common water, and a few drops of the essential oil required! Look to this, ye vigilant guardians, too well paid for nought.

Foreign Medicine.

Action of the Lymphatics.

In the course of a few months, M. Pannizza, of Pavia, will publish a work on the Lymphatics, which, it is expected, will attract great attention. In it he confirms the opinions of Mascagni with reference to the lymphatic vessels; and he further proves, contrary to the researches of M. Lauth, of Strasbourg, and of M. Lippi, that if a part of the substances absorbed by the lymphatics enters into the veins, its passage takes place only through the medium of the ganglion, where it is taken up by the radicles of the vein itself, which arises from the ganglion. M. Pannizza possesses, perhaps, the finest collection ever seen of preparations illustrating the lymphatics of the genital organs: they were made by himself.

Bulletin Médicale de Bourdeaux.

Fatal Mistakes in Dispensing.

Several cases have been of late recorded in the various foreign and British Medical Journals of fatal consequences resulting either from error in dispensing or in prescribing: occasionally the wrong drug being written in the physician's prescription, as recently at Paris, the sulphate of morphia in lieu of the sulphate of quina; and sometimes the wrong drug being dispensed by the chemist, as recently at Brussels and Paris, the bi-chloride of mercury in the place of the proto-chloride. To prevent, in some measure, the occurrence of this accident, a writer in one of the French Medical Journals, which has lately come under our notice, recommends that whatever *new names* may be (perhaps of necessity) adopted in chemistry, to designate the same article, they should be restricted to that science only, the old name being retained for prescriptions, &c., as many of these errors arise from the multiplicity of names indicating a single drug; calomel, for instance, having about as many as a Spanish hidalgo. If this plan were adopted, he contends corrosive sublimate could never be given in mistake for calomel.

This proposition would certainly be of advantage—there cannot be any doubt on that score; but even its adoption would remove little more than a third of the evil, whilst the plan enforced in the Russian Pharmacopœia, as recorded in the *Bulletin Médicale Belge*, is far more extensive, and, consequently, more useful, inasmuch as it would tend to prevent the injurious consequences resulting from an error in the prescription, as well as in the dispensing, and there would then be only one source of mischief remaining.

The plan we have already mentioned of employing only the old names of drugs will be so far of use, that it is suited to the capacity of the majority of those who compose the class of druggists, and their apprentices, of the pre-

sent day;—of course we are alluding to Great Britain only; on the Continent they are well educated men, who have passed the necessary examinations. Here, any individual who pleases, even if his pharmaceutical knowledge be not more extensive than an acquaintance with rhubarb and salts, may become a chemist and druggist, and with him, consequently, such a mistake as giving a poisonous dose of the pulv. ipecac. comp. instead of an emetic of the pulv. ipecac. might readily happen, and indeed has happened. The plan alluded to of the Russians does not include any measures for the prevention of any errors which may arise from the ignorance of the dispensers, such not being presumed to be in existence, as all their chemists are duly and severely examined. The remedy is in the hands of Parliament, and to that legislative body we leave it.

We shall now proceed to detail, in a few words, the regulations of the Prussian Pharmacopœia. The authors of that work have drawn up a table of heroic medicines, with the largest doses which ought to be given appended, and no physician may prescribe, or any druggist dispense, larger quantities, unless a note of admiration (!) be attached. If this were done in all cases, the druggists would be aware when the physician really meant to increase the dose, and also when a mistake had been made; at any rate, should the one prescribe or the other dispense without this mark, the responsibility and the punishment would attach to one person only, and to him deservedly, as such an error would be decidedly owing to the most culpable negligence.

The Statistics of Forgery, Suicides, Rape, and Murders, in France, England, and Spain.

BY M. JULIA DE FONTANELLE.

M. Chevallier published in the *Journal de Chimie Médicale*, for July, 1834, an interesting essay on falsified writings, in which he gave the statistics of this crime in France from 1825 to 1831, inclusive. His calculation gives, as the medium, about 283 every year, whilst in Great Britain there have been only 417 in eleven years, that is, about 43·4 in each year.

We have felt some curiosity to ascertain the relative number of forgers in the two most highly civilised nations, and in the one in which, while ruled by the Arabs, arts, letters, and sciences, were successfully cultivated, and which now, under the iron rod of its institutions, cannot keep pace with the progress of ages. Many documents upon Spain have been consulted, among others, the *Foreign Quarterly Review*, vol. 5, *One Year in Spain*, *Hawkin's Medical Statistics*, &c., and we are satisfied that in the year 1826 there were forty-five forgeries committed. Now, if we compare these numbers with the population of the three kingdoms, calculated as follows,—

France (in 1831) . . . 32,560,934 inhabitants,
 Great Britain (1831) 20,721,350,
 Spain (1826) . . . 13,950,000,
 we shall have, for every million of inhabitants,—

in France 888 forgers,
 in England 220,
 in Spain 320,

which gives,
 for France 1 in every 113,635,
 for England 1 474,500,
 for Spain 1 312,567.

Thus we perceive, that, of the three kingdoms, France reckons the greatest number of forgers. The causes of this cannot be attributed to the progress of the science of chemistry in this kingdom, because Spain, which is the least advanced of these three nations in that respect, counts a larger number of these criminals than England, which latter is the rival of France.

But, by way of compensation, in 1826 * Spain could count only

Suicides † 16
 Infanticides ‡ 13
 Poisonings 5

We may perceive that in these respects it yields to England and France. The same may be said of duels §; they are so rare in Spain, that in 1826 there only occurred four.

In regard to rape,
 in France (1831) there were 69, or 1 in every 470,000,
 in Spain (1826) there were 62, or 1 in every 240,000,
 in England (1831) there were 77, or 1 in every 180,000.

This fact gives rise to a curious remark; it is, that neither the climate nor the violence of the passions renders the crime of violation more frequent, as it might have been supposed, since France offers the fewest, and in England they are more than double the number of those in France, and a third more than in Spain.

Finally, homicide and the temptations to crime are in Spain forty-five times more

frequent than in France, and twenty-seven times more so than in England; and it may be affirmed that, with the exception of Dalmatia, there is no other country in Europe, not even Corsica, where there are so many assassinations attempted or completed as in Spain.—*Journal de Chimie Médicale et de Toxicologie.*

Amputation of the Leg for Caries of the Bones of the Tarsus—Torsion of the Arteries, notwithstanding considerable softening of their Tunics.

BY M. AMUSSAT.

M. Delm, an advocate, thirty years of age, suffered for the first time, when seven years old, from pain in the left ankle. This pain recurred occasionally, but always yielded to rest.

Three years ago the pain became much greater than he ever before experienced; the ankle swelled for the first time, and the patient was obliged to use crutches. Repose, emollients, and discutient applications were employed, but unavailingly, the disease continued to make progress.

Amputation was now recommended as the only means of preserving life, but the patient rejecting this proposal, he was recommended to try the baths, and accordingly went successively to Aix la Chapelle, Bagnères, and Aix in Savoy. The douches which were employed caused the formation of several fistulæ, from which unhealthy pus was evacuated, and sometimes small portions of bone. His strength and courage were now much diminished, but during his six weeks' residence at Aix in Savoy, his appetite and strength returned; he became stouter, and the pus which passed from the fistula became lactescent and inodorous.

He returned to Paris, cheered with the hope of avoiding the operation; but some time afterwards he again lost ground, the pain became as severe as ever, and the discharge unhealthy. Diarrhœa supervened, and had continued for a month, when M. Amussat saw him; it soon ceased by the administration of kino.

M. Amussat saw him for the first time on the 18th of January, 1833. The patient presented at that time a most deplorable appearance; the lower half of the body, including the abdomen, was completely anasarcaous; the penis was three times its natural size, and almost diaphanous, the scrotum being equal in size to the head.

A consultation was held on the case, and amputation was determined on, and performed on the 20th. The muscles were soft, discoloured, infiltrated, and, as it were, macerated; the coats of the arteries were softened, and were surrounded by a lardaceous substance, which seemed to form a canal round those vessels and the nerves; both the external and the internal membranes of the

* The year 1826 has been chosen because the most exact details relative to that period could be obtained.

† Suicide is less frequent in Spain than in any other country; this is owing not merely to religion, but because it is considered a crime.

‡ Infanticide is very rare in Spain. If it were compared with any other state, Russia, for example, we should see that with an almost equal population there are nearly 100 infanticides in the year.

§ The same remark will apply to duelling as to suicide. It is a crime punished by the death of the survivor, and when therefore one takes place, it is generally without seconds. This circumstance may tend to render statistical details imperfect.—TRANS.

arteries were easily lacerable, but yet torsion was successfully performed, and without pain. On examination of the part which had been removed, the os calcis and the lower part of the fibula were found to be engaged in the disease, the former very extensively.—*Gazette des Hôpitaux.*

On the effects of General Bleeding in two cases of Dropsy, one Acute and Idiopathic, the other Symptomatic.

COMMUNICATED BY M. TARDIEU, M.D., AT SANGUES.

J. H. du Cros, residing at Sangues, was engaged, in the year 1833, in mowing a meadow. While in a state of profuse perspiration, he rashly plunged both the fore-arms into a fountain of very cold water. The next day he was labouring under violent fever; a physician, one of the supporters of the doctrine of *la médecine expectante*, was called in; he ordered little else than a nitre drink. When I saw the patient eleven days after, I found him in the following condition:—the countenance flushed and swollen; dyspnoea considerable; pulse intermittent, hard, and frequent; suppression of urine. He laboured under ascites and anasarca; the scrotum and penis were infiltrated.

He was forthwith bled freely from the arm, and the next day, relief having been experienced, the bleeding was repeated; no medicines were given. In the course of four days the anasarca had disappeared; a few spoonfuls of oxymel were given as an auxiliary, and in the course of another eight days the patient was well.

B— had been suffering for three years from dyspnoea and insomnia. His medical attendant, considering his complaint to be simply asthma, contented himself with the administration of some diuretics. Another physician, who was consulted occasionally, thought he had discovered an aneurism of the heart, and even located it in the right auricle. He accordingly ordered bleedings, digitalis, squills, &c. But the ordinary medical attendant of the family, who was a partisan of the *médecine expectante*, forbade the bleedings, and threatened his patient with dropsy if he submitted to them. The patient became alarmed, and refused to be bled, but notwithstanding ascites ensued.

When I was called in, the patient presented the following symptoms:—Complete insomnia for the last month, with orthopnoea for the same period; countenance flushed and swelled; eyes projecting; pulse intermitting, tumultuous, and disappearing occasionally under pressure; the pulse at the wrist is isochronous with that of the heart; ascites and anasarca, the latter also affecting the genital organs; suppression of urine for the last three days. The patient, who was only in his forty-sixth year, and of a strong constitution, was in such a state of suffering, that he had attempted suicide.

He was immediately bled to eighteen ounces from the arm. In order to ascertain what effect it would produce, I ordered all medicines to be omitted. In the course of twenty-four hours he was improved. The day after the next he was bled again, and twenty leeches applied to the region of the heart; the dyspnoea ceased, and the anasarca gradually disappeared. He was then ordered digitalis internally and externally, according to M. Chrétien's method; squills were also employed; and, in twenty-five days, he was cured, the pulse and the heart had almost resumed their normal condition, and the patient employed himself in his ordinary occupations, which he may doubtless be able to do for a long while, if he pay particular attention to the rules of hygiene.—*Journal de Médecine et de Chirurgie Pratiques.*

Analysis of the Bark of the Prunus Virginiana.

BY STEPHEN PROCTOR.

This bark contains fecula, resin, tannin, gallic acid, a fatty matter, lignine, red colouring matter, volatile oil, hydrocyanic acid, salts of lime and potass, and oxide of iron.

The volatile oil of the bark of the prunus Virginiana is very analogous with the essential oil of bitter almonds; it produces the same effect on the system, and may be employed as its substitute. Two drops killed a strong cat in five minutes. Dr. Conwel, in his Dissertation on Vegetable Chemistry, says he procured an alkali from the bark of the prunus Virginiana, which he called cerasine, but Mr. Proctor is of opinion that it is only a salt of lime.—*Journal of the Philadelphia College of Pharmacy.*

Analysis of the Cimicifuga Racemosa.

BY MR. JOHN FITZMAN.

The root of this plant, the only part of it used in medicine, is composed of a fatty matter, gum, fecula, resin, tannin, wax, gallic acid, sugar, oil, a black colouring matter, a green colouring matter, lignine, salts of potass, lime, magnesia, and iron.—*Op. cit.*

Analysis of the Leaves of the Morus Alba.

BY M. LASSAIGNE.

One hundred parts of the fresh leaves of this tree afford,

Water of vegetation	66.6
Albumen	2.7
Chlorophyllum	1.4
UnchrySTALLISABLE SACCHARINE MATTER, and bitter matter	1.5
Coloured mucilage	8.1
Malate of lime	2.0
Lignine	17.7
	<hr/>
	100.0

—*Journal de Chimie Medicale, et de Toxicologie.*

Foreign Hospital Reports.

HÔTEL DIEU.

Cerebral Congestion, consequent on Violent Grief, treated by Bleeding.

A woman, about 54 years of age, was admitted into the Salle St. Lazare, of the Hôtel Dieu, and placed under the care of M. Chomel. She is the widow of an old soldier; about four years ago several circumstances happened which caused great mental anxiety. Towards the middle of January this was renewed, in consequence of which she was seized with severe headach, soon followed by delirium. She was brought to the hospital two days afterwards, and passed the first night furiously delirious. When visited the next day, the face was flushed, the forehead hot, the eyes glaring, conjunctiva injected. The delirium had somewhat abated, and she could answer a few questions correctly. She was accordingly asked if, previous to her attack, she had not suffered from violent grief. She replied in the affirmative, and appeared to be then much disturbed. She was immediately bled from the arm, and had mustard pediluvia. The next day, all the bad symptoms ceased, and three days afterwards, she left the hospital.

Slight Pneumonia, with Pleuritic Effusion.

A young man, about twenty years of age, was admitted into the clinical ward, under M. Chomel, on the 18th of January, with the following symptoms:—Decubitus dorsalis; wandering pain over the whole of the right side of the chest; slight difficulties of breathing; cough, with expectoration tinged with blood; dull sound and obscurity of the respiratory murmur, with resonance of the voice in the two lower thirds of the right thoracic cavity; the pulse was scarcely increased in frequency, and there was not any disorder of the digestive tube or of the nervous system. These symptoms commenced about five or six days previous.

In this case, M. Chomel considered the diagnosis to be rather difficult. The viscid expectoration, partly bloody, left no doubt as to the existence of pneumonia; but were the dulness of sound and absence of the respiratory murmur to be considered equally indicative of the inflammatory action in the lungs? M. Chomel decided in the negative. Percussion affords a dull sound, and the voice becomes resonant, only when the lung is hepatised. Now the absence of fever would not allow of the surmise of hepatisation of two of the lobes of the right lung. M. Chomel was therefore of opinion that the dulness of sound, and the absence of the respiratory murmur were owing to the presence of a certain quantity of fluid effused in the pleura, and that there was present a slight pneumonia, and in the first degree only. Venesection was performed.

The progress of the case proved the correctness of the diagnosis. The crepitating râle, which was not audible at first, was heard in proportion as the effusion diminished. The absorption of the fluid took place rapidly, and, some days after, the respiratory murmur could be distinguished, and also a sound as of friction caused by the false membranes which were becoming organised on the surface of the pleura.

HÔPITAL SAINT LOUIS.

Fissure at the Anus—Excision.

CASE I.—A young woman, æt. 25, was admitted into the Salle Saint Augustin of this hospital, on 10th Dec., 1834, under the care of M. Jobert. She is of a nervous and very irritable temperament, and has never enjoyed good health. The menses commenced between fifteen and sixteen, but are always very irregular. She became pregnant in the beginning of the year 1833, and went her full time. The process of parturition was protracted, but not unnatural.

On recovering from the puerperal condition she became subject to the following symptoms: great constipation and severe colic, the passage of a stool requiring great efforts, and the feces slightly tinged with blood. She was also subject to pains in the side, a feeling of weight in the pelvis when walking, and itching of the anus and vulva. To relieve this condition she had recourse to baths, and used to introduce into the vagina a sponge soaked in a decoction of Provence roses and wine. She again became pregnant, but aborted about the second month, as she believes, five months after her first labour.

Four days after abortion had taken place she was admitted into the Hôtel Dieu, where prolapsus uteri was discovered. Leeches to the groin and general bleeding were prescribed, and then a pessary was passed, but without relief. She soon left the Hôtel Dieu, and five weeks after gave up the pessary on account of the pain it caused. She did not have recourse to any other plan of treatment, until her admission into the Hôpital Saint Louis.

With the assistance of a speculum, a spot of ulceration was discovered on the os uteri, which was cauterised three times. The woman declared that she had never had syphilis. She compared her feelings when at stools to a sensation of tearing and almost insupportable burning pain, which induced M. Jobert (who has often seen ulceration of the cervix uteri accompanied with fissure at the anus) to examine that part, when he discovered a small superficial ulcer situated at the posterior part between the folds of this opening.

On the 27th Jan. the woman was placed on the edge of her bed as for the operation for fistula, when M. Jobert took hold of the part containing the ulcer with a pair of forceps, and excised it. No dressing was applied, but the patient had a sedative and a semicupium.

The relief experienced was very great and almost immediate; the feeling of weight and pain in the pelvis ceased almost entirely, and what little remained was attributable to the disposition of the uterus to become prolapsed. The stools passed easily, and nearly free from pain, except a slight burning sensation from the passage of the fæces over the lips of the wound. The bowels were kept open by occasional doses of Seidlitz water, also by the administration of enemata. The incision cicatrised by the 19th, and the ulcer of the uterus healed by the 25th. She was discharged on the 26th of January.

CASE II.—A female, 28 years old, of feeble constitution, always labouring under ill health, and peculiarly liable to colds, was admitted the 11th of November, 1834. She has never suffered, she says, from any venereal disease.

When about 13 years old, she fell upon the edge of a stool, by which the labia majora were much contused, and an abscess formed. She has since then laboured under leucorrhœa. Six weeks after this fall, menstruation commenced, but has always been performed irregularly, and at each menstrual period she had violent attacks of colic. This continued up to the period of her marriage, about twenty months ago; leucorrhœa remained, and to it were now superadded severe pain in the matrix, and a feeling of weight in the pelvis. She became pregnant, which added materially to her sufferings, for by the time she had reached her fifth month, she could not walk, on account of the violence of the pain in the uterus. This organ, she stated, always seemed to her as if on the point of being prolapsed, when she stood upright. The labour was natural, but the leucorrhœa afterwards increased, and the pain, which at first appeared to be lessened, became more intense.

She had been always constipated, but much more so during pregnancy, and she then discovered that she had piles which bled when at stool. About a year before she married, she perceived a burning sensation, and severe pain when passing an evacuation; during pregnancy, and after parturition, these symptoms increased very much. Latterly, indeed, she has also had a most intense feeling of tearing and burning pain in the part.

Up to the time of her admission into the hospital, nothing had been done to relieve her. An examination was forthwith made with the speculum, and the neck of the uterus was ascertained to be ulcerated. Caustic was applied, and severe bronchitis followed; three weeks afterwards the application was repeated, and the bronchitis reappeared, so that the caustic was abandoned. The escharotic employed was the acid nitrate of mercury, and after each application the gums swelled, and slight salivation ensued. This woman had never been mercurialised.

From the symptoms under which she laboured, M. Jobert suspected the existence of

anal fissure, and an examination proved that he was correct. A similar operation to that of the preceding case was performed, and with a like success. Relief was almost immediate, and no bad symptoms retarded the cure. By the 26th of January, the wound had healed, but she was then under treatment for the ulceration of the cervix uteri.

DEATH OF M. DUPUYTREN.

THE eloquent professor of the Hôtel Dieu, the illustrious successor of Petit and Dessault, the rival of the most celebrated surgeons in Europe, the master of so many promising pupils, the hope and honour of the French schools of surgery,—in a word, the celebrated Dupuytren is dead. He expired early in the morning of Sunday last, after an illness marked by extreme suffering, the fatal results of which he fully anticipated, and the symptoms of which he actually analysed during their progress.

Guillaume Dupuytren was born at Pierre Buffiere, in the department of La Haute Vienne, on the 5th of October, 1778. His parents possessed but very slender means, and never intended to have sent him to Paris; but, while still a child, an officer of a regiment of cavalry quartered in the town was struck by his physiognomy, and offered to take him with him to the capital. The proposal was accepted, and at twelve years of age, in the year 1790, he commenced his career, and was shortly introduced to M. Thouret, a celebrated physician, who thoroughly appreciated his abilities, and conceived a great affection for him. Dupuytren was admitted as a Surgeon of the 2nd class on the 26th Fructidor of the year 10, Doctor in 1803, Assistant Surgeon-in-Chief, in 1808, and in 1812 he obtained, in a contest with a host of talented competitors, the Chair of the Professor of Surgery. In 1815 he was appointed Surgeon-in-Chief of the Hotel Dieu, and Member of the Institute in 1818.

His works are numerous on Anatomy, Physiology, and Pathology, besides various other treatises. M. Dupuytren was first attacked in November, 1833, by a slight fit of apoplexy, the result of which caused a slight paralysis of the mouth, and a difficulty in expressing himself, which induced his numerous friends to urge him to abandon his labours, and seek a renewal of health in Italy. He accordingly quitted France for Rome and Naples on the 24th November, 1833. In March, 1834, he returned to Paris, and apparently recovered, when he immediately renewed his lectures at the Hôtel Dieu, and presided at the surgical examination in the Ecole de Médecine. He probably here contracted a second disorder, which added to the effects of the first, and unfortunately the nature of this disease, which was pleurisy, was at first mistaken, attention being entirely devoted to-

wards a cerebral affection. In July last he resolved to try sea-bathing, but at the end of a month he returned to Paris worse than he set out. The disease had now made so decided a progress, that it was no longer possible to be deceived in its character. Every means were employed, but to obtain relief only, as the cure was not in the least probable, and he finally expired at half-past three on the morning of the 8th instant, in the 56th year of his age, in the full possession of his faculties to the last. To the last moment he gave professional advice; and, on the evening preceding his death, he caused his journal to be read to him as was his custom.

M. Dupuytren has left a large fortune. The principal dispositions of his will are known. He leaves to the Faculty of Medicine two hundred thousand francs for the endowment of a Professorship of Pathological Anatomy, which will be open to competition. It is the intention of the Faculty to erect at the same time, in their new hospital, a Museum of Anatomy, to be called the *Musée Dupuytren*. MM. Sanson and Bégin are charged with the termination of his "Memoir on the Shape;" M. Marx will edit his other publications, and succeeds to all the instruments of his late master and friend. M. Dupuytren has left his library to his nephew, and he has not forgotten his assistants in the Hôtel Dieu, or his domestic servants.

According to his latest desire, he has bequeathed his body to MM. Broussais and Cruveilhier, who, in conjunction with Professor Bouillaud, MM. Delmas and Marx, have performed the autopsy. The brain presented a remarkable volume: its weight, after having been perfectly dried was 2lbs. 14ozs.; in the right lobe traces were found of the former apoplectic rupture. The right pleuritic cavity contained a quantity of serous matter; the heart was very large, and weighed 20ozs., its ordinary weight being about 12; the kidneys were softened, and contained gravel.

DR. INGLEBY'S ILLUSTRATIONS IN MIDWIFERY.

Irregularity in the form of the Abdomen.

We occasionally meet with a singular deviation from that uniformity in the shape of the uterine tumour which characterises pregnancy: I allude to a partial and circumscribed elevation of the uterine tumour continuous with the general development, and neither affected by the position of the body, nor materially changed by pressure. It is not unlike a fibrous tumour developed under the uterine peritoneum, in advance of the surrounding parts, and has not, I think, been distinctly described by authors. This deception appears to have influenced the medical officers of a public Institution in the case of a woman far advanced in pregnancy, and in whom the

uterus chiefly occupied one side, and resembled two large steatomatous tumours. Although I am not prepared to say that the appearance may not sometimes consist in an irregular development of the uterus, I incline to the opinion that it is occasioned by a faulty state of the abdominal parietes, resembling in this respect a partial vesico-vaginal hernia. It is, perhaps, occasioned by a separation of the recti muscles. In persons, at least, who have borne many children, the irregularity in the contraction of the muscles not unfrequently occasions a very pointed deformity of the abdominal coverings. In one such instance, after the birth of an unusually large child, I could easily have passed my hand through the aperture.

Auscultation.

Upon the subject of auscultation I have scarcely anything to advance. Although far from an expert auscultator, I have very distinctly detected both the soufflet and the pulsation of the foetal heart by means of the stethoscope as well as the naked ear. But the soufflet is common to several diseases, and is therefore an uncertain evidence of pregnancy. This sound will be rendered obscure when the centre of the placenta corresponds with the centre of the fundus uteri on its posterior surface, and (as Dr. Rigby observes) will be scarcely perceptible when the placenta is attached to the uterine orifice. The pulsation of the foetal heart is of course conclusive of the presence of a living child within the abdomen. This sound is not distinctly heard before the fifth or sixth month, at least I have not been able to distinguish it at earlier periods; a circumstance referable, perhaps, to my own experience in auscultation. The pulsation of the foetal heart may also be too feeble to be communicated to the ear. In the case of Cæsarean operation before mentioned, the foetal heart could not be heard to pulsate, notwithstanding a most minute examination by several practitioners. The patient persisted, however, that she felt the child move, and it was extracted alive. The waters had been evacuated a long time, and the pressure which the uterus made upon the body of the child, I conclude, rendered the pulsations of the heart too feeble to be distinguished.—*The Dublin Journal of Medical and Chemical Sciences.*

In the development of the nervous system of man, he passes through the various forms which this system presents, from the very first nervous data in the polypus to its full perfection in man. Man displays the perfection of organisation; he stands pre-eminent in physical, but, above all, in vital and mental, properties. Almost every system in quadrupeds is beneath his in structure. He is in every sense viewed by the physiologist or the metaphysician at the head of creation.—*Hufeland's Journal.*

British Hospital Report.

WESTMINSTER HOSPITAL.

Concussion—Premature Labour.

CASE I.—Martha Flood, a woman of middle age, coarse featured, so far advanced in pregnancy as to expect to be put to bed every day, was admitted September the 5th, 1833, into Anne's Ward, under Mr. Guthrie, about half-past eleven A.M. When she was brought in, she was in a state of complete insensibility, but exceedingly restless, throwing herself from side to side, and requiring several persons to keep her quiet in bed; the skin generally was cool, as likewise the scalp; pulse small and sharp; pupils not contracted, but insensible to the light; is reported to have vomited.

Those who brought her to the hospital, state that the preceding evening she fell down some steps into an ironmonger's yard, falling on her face; she became insensible immediately, and has continued so ever since; there was some bleeding from the nose. A surgeon was called in, who bled her, but they cannot say to what amount; finding she did not improve, he sent her here. She was ordered cold lotions to the head, and an injection immediately; the strait waistcoat applied, on account of her violence and restlessness.

Mr. Guthrie saw her at one P.M., and ordered her to be bled to fourteen ounces, the injection to be repeated, and purgatives to be employed, until the bowels were freely opened. He gave an unfavourable prognosis, and thought from her appearance that, previous to the accident, she must have been maniacal.

8 P.M. Castor-oil injections have been administered, and the bowels have since acted freely; she still continues insensible, with occasional stertorous breathing; continues very restless; pupils are rather more contractile; labour-pains commenced two hours since, at first paltry and grinding, but latterly sharp and almost incessant, according to the report of the nurse; the house-surgeon has just been summoned to the ward, and within a few minutes a girl, apparently lifeless, was born; no pulsation could be perceived at either fontanelle, but it continued, although feebly, in the cord, which was not tied, as hopes of preserving the child's life were entertained. Stimulation was at first attempted by *claquant les fesses*, which proving unavailing, brandy was rubbed on the face, at the suggestion of one of the dressers, previous to which the tracheal pipe was recommended. The brandy, however, proved successful, the child gradually reviving, at first sighing at intervals, which become less and less prolonged, and finally full respiration occurring, the cord was tied, and divided; the placenta came away soon after. The old women in the ward then took

charge of the infant, and were soon busily engaged, cramming it with sugar and butter.

6th. Is still delirious, but more rational, and the pupils are natural. She can answer questions, and says she suffers from headache; the pulse is full, strong, and frequent; bowels open by injections; there is no heat of scalp; ordered to be cupped to ζ xij. from the head, which, however, could not be effected, owing to her struggles; a few ounces only were obtained from the head and nucha, to which glasses were applied.

7th. She continues very restless, but is rather more sensible; pulse not so full. The child passed the night pretty well, but has been in convulsions the whole day, with a livid aspect; the warm-bath was tried in the afternoon with evident relief, but the child died in the evening.

8th. She passed the whole of yesterday (the 7th) in much the same state as before; in the middle of the day two dozen leeches were applied to the temples, and the same number again at night; they bled very freely, and she appeared much improved afterwards. She passed a much quieter night, and is now much more rational than she has been since she was admitted, answering questions sensibly, but unwillingly; complains of great pain in the head, and general soreness of the body; the pupils are natural; pulse moderate and regular, bowels open; no heat of scalp; tongue covered with a thin white coat of fur; no appearance of milk. Has had a blister to the epigastrium, and is now ordered one for the back of the neck.

9th. Another dozen of leeches were applied last night, but she has still pain in the head, and the scalp is hot, owing probably to her wearing a thick handkerchief round the head to conceal the barber's work, and her neglect of the cold lotions ordered; pulse rather smaller, and not frequent; is perfectly sensible; rather feverish, and she has had rigors; breasts swelled, and a slight secretion of milk has taken place; lochia abundant. The blister drew well.

11th. Complained last night of great pain in the head, and, as the pulse was then very strong, was bled to fourteen ounces, by which she was very much relieved; the pupils yesterday were rather dilated, but are now again contracting, and she is altogether improved, with the exception of that part of the face, where the effects of the fall were felt, there is considerable tumefaction and great tenderness; pulse moderate, soft, and regular, 80; tongue furred; bowels freely opened. A midwife, who has been to see her, has applied wetted paper to the breasts to repel the milk. Directed to have them drawn with a proper instrument.

12th. Continues to improve; put upon fish diet.

13th. Has very little pain; no bad symptoms.
15th. A small abscess, which had formed on the right ala nasi, opened.

20th. Nearly well.
22nd. Dismissed.

CASE II.—Concussion.—Mary Farley, æt. 12, admitted Sept. 30th, 1833, into Anne's Ward, under Mr. White, at 7, P.M., in consequence of having fallen about twelve feet in height from a ladder, about two hours previously. On admission she was cold and insensible; the head was shaved immediately, and the mark of a bruise discovered on the left parietal protuberance, where the skin was chafed, but not torn; no fracture could be discovered by the finger; total insensibility (is reported, however, to have spoken once or twice since admission); breathing stertorous; pupils not dilated, and they are slightly sensible to the stimulus of light; body generally cool; pulse small and slow. The stomach warmer has been applied, and bottles of hot water to the feet.

Oct. 1st. Reaction having taken place, twelve leeches were applied to the temples last night; has had a dose of aperient medicine, and cold lotions to the head, and was ordered an injection, if necessary; the stertorous breathing continued for some time after the application of the leeches, which bled well; she passed a tolerable night, and is now perfectly sensible; answers questions rationally; the bowels were freely opened by the aperient medicine, so that the enema was not administered; skin hot; face flushed; tongue furred; no headach; pulse full and quickened; pupils natural. Cont. lotio evaporans, et haust. cathart.

2nd. Doing well.
8th. Dismissed.

CASE III.—Concussion—Laceration of the Scalp.—Charles Boileau, æt. 25, was admitted the 16th of Oct., 1834, under Mr. Guthrie, into Mark's Ward. Sanguine temperament; of the middle size, and of robust make; a native of Paris, but long resident in England; an engine-turner by trade. According to his account, he was present at the fire which destroyed both Houses of Parliament, viewing it from Abingdon-street; on turning away to leave the spot, he received a blow from a policeman's staff, which felled him to the ground with such violence that he became insensible. He was picked up, and brought to the hospital; before he got there, however, he had recovered consciousness so far as to be able to take cognisance of passing events, but laboured under dizziness, and some confusion of intellect. On examination, a lacerated wound of an inch and a half in extent, over the left parietal bone, and another, not so long, but still deeper, on the left temple, were discovered. The latter was very jagged, and exposed the bone beneath; there were no marks of fracture. The symptoms of concussion gradually disappeared; the pupils were not dilated, and the pulse was of moderate power. The head

was immediately shaved, the man was sent to bed, and the wounds dressed.

Symptoms of inflammatory action and disorder of the head came on in the course of the next day, and continued with some severity, for a few days. General blood-letting, purgation, starvation, and quietude, were the remedial measures which were put in force, and, under this plan of treatment, relief was experienced. By the third day, suppuration was established in the wounds; the pus secreted by that on the forehead was not laudable, and the edges of the wound had a dirty, blackish appearance. The local treatment consisted in the application of poultices.

The suppuration continued abundant for some days, becoming of a healthy character, as the general health improved, granulations formed, and by the 9th of the following November, the wound on the parietal bone had healed; on the 14th he was dismissed cured, that on the temple having cicatrised without exfoliation from the exposed and apparently denuded bone.

CASE IV.—Concussion—Mania.—Samuel Charles Deacon, æt. 37, was admitted Nov. 17th, 1834, under Mr. Guthrie, into Northumberland Ward. A short time before he was admitted, while intoxicated, he slipped and fell, striking the head against the ground, lacerating the scalp just above the right frontal eminence, and exposing the bone; one or two other slight injuries to other parts were sustained. When brought in, he was labouring under symptoms of stupor, but could be roused by speaking to him rather loudly, relapsing directly into the same state; the pupils were not dilated, and there was no stertor. He was placed in bed, and the head shaved; about sixteen ounces of blood were taken from the arm, and a purgative administered, which acted, but with little relief to the symptoms. He continued in much the same state for the next few days, being rather more noisy and troublesome during the night, according to the report of the nurse, and requiring restraint. Venesection was again performed, and eighteen ounces of blood abstracted, with so much advantage, that under its influence, combined with that of active purgatives, the stupor gradually disappeared, leaving a state of mania, approaching even to idiocy, for which the only means then known of accounting was that it is an occasional sequence of concussion, in lieu, as it were, of phrenitis. The blood which was taken showed inflammatory marks.

He gradually recovered from the ill-effects of the concussion, but remained maniacal. The mystery was cleared up a day or two before he left the hospital, by some of his friends acknowledging that he had been in that state for many years. He was dismissed on the 6th of December.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, February 5, 1835:—Adolphus Taylor, —; John Gill, Stoke Courcy, Somersetshire; John Tuer, Leeds; John Llewellyn, Cowbridge, Glamorganshire; Geo. Robt. Van Freer, Enderby, Leicestershire; Francis Lovell, —.

MISCELLANY OF FACTS.

Embalming.—On the 6th of March last, Professor Franchina, of Palermo, embalmed a body in the anatomical theatre at Palermo. On the 14th of May, consequently more than two months afterwards, this new mummy was again examined in the presence of several hundred persons. The features of the deceased had undergone no alteration; the body was perfectly flexible; the flesh had the natural hue of death; but not the slightest smell of putrefaction was perceptible. The viscera, which, according to this new method, need not be removed, were well preserved, especially the lungs, which were found, on examination, in the most perfect state. The means employed by the Professor are not stated—indeed, it appears that he makes a secret of them. Larrey, the Surgeon-in-Chief of the French Army, employed for this purpose sublimate of mercury, which has lately been applied by Kyan to the prevention of the dry rot in timber. The body was laid in a solution of the sublimate, which was kept of equal strength, by small bags of the sublimate suspended in it. "I have myself seen," says Dr. Nürnberg, the writer of the article from which this paragraph is translated, "a body treated in this manner, which was carried through the New Mark (of Brandenburg), after the battle of Eylau, and which was in perfect preservation, but the bowels as well as the eyes, had been taken out." Franchina must therefore be acquainted with some other process.

We have again to record some splendid bequests:—The late Mrs. Temple, of the Circus, Bath, has bequeathed £1000 to the Bath General Hospital, and £100 to the United Hospital. The same lady has left the following sums to the underecited London charities:—£1000 to the Lambeth Female Orphan Asylum; £500 to the Asylum for the Indigent Blind; £500 to the Asylum for the Deaf and Dumb. The whole of these bequests are made free of legacy duty.

APPOINTMENTS.

Naval.—Mr. W. Gunn, assistant-surgeon of the Isis, to be surgeon. Mr. P. J. Pillmore, to be assistant-surgeon, and do duty at Haslar Hospital.

Military.—Assistant-Surgeon Russell, M.D., to the depot of the 76th Foot at Londonderry.

General.—Mr. Archer, surgeon of the Birmingham and Deritend Self-Supporting Dispensary. Mr. B. Blower, house-surgeon to the Northern Hospital, Liverpool.

Resignation.—Mr. J. A. Gillham, surgeon to the Royal Universal Infirmary for Children, Waterloo Bridge Road.

DEATHS.

At Dinapore, East Indies, Assistant-Surgeon W. Scott. At Cannanore, East Indies, Surgeon A. Patterson of the Medical Establishment. Mr. James Porter, surgeon, of Torry, Scotland. In Jamaica, Dr. Joseph Reay, formerly of Durham. Mr. William Kirk, of Girvan, Scotland, surgeon. Dr. J. S. Jefford, of Bradpole, near Bridport. Mr.

Sunderland, senior surgeon of the Halifax General Dispensary.

Deaths in the Army Medical Department last month.—Staff Surgeons Rogers and Stringer, h. p.; Surgeon Titford, h. p. 15th Garr. Bn.; Assistant-Surgeon Leslie, h. p. 45th Foot; Vet. Surgeons Gain, h. p. 9th Drag., and Shipp, h. p. 23rd Drag.

WEEKLY BILL OF MORTALITY.

London, Tuesday, February 10th, 1835.

Abscess	1	Hooping-Cough	16
Age and Debility	49	Inflammation	25
Apoplexy	3	Inflammation of the	
Asthma	27	Bowels & Stomach	5
Cancer	3	Inflammation of the	
Childbirth	6	Brain	1
Consumption	70	Inflammation of the	
Constipation of the		Lungs and Pleura	11
Bowels	1	Insanity	4
Convulsions	41	Jaundice	1
Croup	3	Liver, Diseased	9
Dentition, or Teeth-		Measles	8
ing	10	Mortification	3
Diarrhoea	1	Paralysis	4
Dropsy	14	Small Pox	15
Dropsy on the Brain	16	Sore Throat & Quinsey	2
Dropsy on the Chest	1	Spasms	2
Fever	4	Stone and Gravel	2
Fever, Scarlet	11	Thrush	3
Fever, Typhus	3	Tumour	2
Gout	2	Unknown Causes	27
Hæmorrhage	2		
Heart, Diseased	3	Stillborn	16

Buried, Males 228 Females 204 Total 432
Increase in Burials reported this week, 24.

BOOKS RECEIVED.

The London Anatomist. No. I. B. G. D. DEMOTT.
Spencer, on Ulcers of the Leg. 8vo.

CORRESPONDENTS.

T. B. shall hear from us by post in a day or two.

X. Z.—The circumstance he relates respecting the adulteration of drugs in various petty chemists' shops, shall at no great distance of time come under our consideration. X. Z. will see in the meantime that we have said a few words on the subject in our present.

A Lover of Truth.—We shall investigate the subject of his letter, and express our opinion in a future number.

Barbutus.—We should have inserted his letter, but we treat the party and his futile attacks with that contempt they merit.

Mr. G. has communicated to us an interesting case of puerperal fever. It occurred in a young woman who had been delivered of a fine child. The placenta was detained for many hours. On the fifth day a tumour of an oval shape was expelled from the uterus. Its structure consisted of a fibrinous mass, which was exceedingly vascular. On the 10th day after delivery she died. The uterus was large, and, as well as the contiguous peritoneum, was in a state of high inflammation. In the left corner of the uterus was a depression corresponding to the size and shape of the tumour; it was coated with a thick layer of a dark-coloured substance. This week the details cannot, we regret, be given.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

London Medical and Surgical Journal.

No. 160.

SATURDAY, FEBRUARY 21, 1835.

VOL. VII.

LECTURES

INTRODUCTORY TO THE COURSE OF THE
INSTITUTES OF MEDICINE,

DELIVERED BY

ROBERT J. GRAVES, M.D.,

King's Professor, Dublin.

LECTURE XI.

GENTLEMEN,—Having spoken of longevity, the mean duration of human life, and the circumstances by which it is influenced, and having made some observations on population and the relative proportions of the sexes, I shall now proceed to the subject of temperament.

The ancients directed a considerable share of attention to this subject, and attributed great importance to a due knowledge of the different temperaments. They believed that the regulation of the economy in health, as well as the prognosis and treatment of disease, depended on an accurate acquaintance with their various modifications, and insisted strongly on the necessity of their study for the successful practice of the healing art. It may be proper to explain (though I do not deal much in definitions) that by temperaments we mean certain appearances of body, supposed to be connected with a peculiar state of health, digestion, temper, and conduct of the system when attacked by disease. You will find in Dr. Bostock's Physiology, that the ancients divided temperaments into four kinds, corresponding to the four qualities of Hippocrates, hot, cold, moist, and dry. These were supposed to give their specific characters to the four ingredients of which the blood was composed, namely, the red part, the phlegm, the yellow, and the black bile; and hence were derived the names of the sanguine, the phlegmatic, the choleric, and the melancholic temperaments, as indicating an excess of each of these substances. Dr. Bostock has endeavoured to reduce these to a better and more intelligible arrangement. He considers that the division of the ancients has some real foundation in nature, although on this, as on

other occasions, false theory has been blended with correct observation. To the four temperaments of Hippocrates, he adds a fifth, and, giving new appellations to the former, he ranges the leading varieties of the human constitution under five denominations, viz. the sanguine, the tonic, the relaxed, the muscular, and the nervous temperaments. He then goes on to describe each of these temperaments respectively, and concludes by observing, that although very few individuals possess any of these characteristics in an extreme degree, and though they may be considerably modified by circumstances, and confounded by intermixture, still we are warranted in believing that different temperaments actually exist, and that they influence the corporeal and mental functions of our frame.

According to all the definitions of temperaments, and among the rest those of Dr. Bostock (to whose account I refer you), you will find that it is not always from external appearances of the body, which a stranger could at once recognise, that a knowledge of any individual's temperament is to be obtained. In truth it does not appear to me to be possible, from any external appearances of body, to distinguish accurately either the ordinary state of health, or the probable issue of disease. We are taught to believe that those who are spare and dark complexioned, are most subject to bilious and abdominal complaints, and that persons of full habit and sanguineous temperament are liable to hæmorrhage, apoplexy, and other analogous morbid actions; while those who are of fair complexion, high colour, light hair, and blue eyes, are supposed to have a tendency to consumption. I do not believe that these observations are founded in fact. With respect to consumption, it is true that we meet with a great number of phthisical patients with fair complexions, red lips, and blue eyes, but then you are to recollect that the majority of the inhabitants of this country possess these characteristics. If you go into France or Italy, you will find consumption not less prevalent among the dark-complexioned, a fact easily accounted for by recollecting that in those countries the bulk of the population is dark and swarthy.

Again, as to the opinion that persons of dark complexion are more subject to abdominal diseases, I must observe that this does not correspond with my experience. While on the continent, where I received a considerable portion of my medical education, I was drilled into a thorough knowledge of temperaments, but I have never derived any particular advantage from this in the prognosis or management of disease.

Phrenologists have been at some pains in arranging temperaments, and have studied the subject for the purpose of enabling them to judge how far temperament may influence or modify the functions of the brain, and how far the quality as well as the quantity of brain are to be taken into account in the formation of individual character. I do not feel bound to enter upon any discussion connected with this subject, or to bring forward arguments against phrenology at the present day, when it is acknowledged by all scientific men, that it is only a species of ingenious empiricism founded on mere hypothetic induction. The admission that temperament should enter as a necessary ingredient into their calculations, is fatal to their system, for it is admitting the existence of a principle of which they can form no estimate. It matters not that one man's brain be of equal size and dimensions with that of another, if it be admitted that temperament exerts an influence on the nervous system of one which renders his brain far more energetic in the performance of its functions. Such an admission as this is quite sufficient to derange all their calculations. For my own part, I feel perfectly convinced that the quality of brain should be an essential element in our calculations, were we able to form an estimate of the mental powers from an examination of the cerebral mass.

Some of the appetites to which man is liable, and which are destined partly for the support of the individual, and partly for the propagation of the species, demand a brief notice. First, with respect to the appetite for food. I do not intend to enter into any general considerations relative to the phenomena and theory of the process of digestion, my purpose, at present, is merely to state a few facts concerning the appetite for food. This instinctive desire, though manifested at the very earliest period of extra-uterine life, does not appear to exist in the fœtus during the whole time of its sojourn in the uterus, but, during the last two months of utero-gestation, the stomach is so prepared, that, if expulsion should occur, the fœtus is capable of commencing the process of digestion. At this period, the food by which the young of most of the higher classes of animals is nourished, consists of a bland emulsion prepared by the hand of nature, and composed of oily, saccharine, caseous, and albuminous ingredients, blended with inimitable art, so as to form a highly nutritious and digestible aliment, not requiring the aid of teeth for mastication, or of saliva for deglutition. From the

facility with which it is digested, and the large quantity of nutriment which it contains, assimilation goes on with great rapidity, and thus a sufficient quantity of materials is furnished to supply the wants of the growing body. When we come to the subject of animal chemistry, I shall examine the composition of milk in detail, for the present I shall only remark (and the fact is of great importance in many points of view) that the aliment destined for the nutrition of all the higher animals during the tenderest and most delicate stage of post-fœtal life, is not a simple, but a compound substance. In birds, the food of the young is the same as that of the parent, but it is generally prepared by some previous act on the part of the parent, who either breaks it up, so as to render it more easily swallowed, or by taking it into the crop, reduces it to a pulpy state, in which it is returned for the support of the young bird.

Prompted by instinct, the infant immediately after birth seeks the food best suited to its wants, and, when placed near the breast, proceeds at once to gratify this earliest of propensities. There is nothing more curious or interesting in the history and phenomena of animal life, than the remarkable discrimination, and almost unerring tact, manifested by animals in the selection of food. I have already alluded to this subject, and mentioned that animals almost invariably choose the food which is proper for them, nevertheless, they sometimes commit mistakes, particularly when impelled by strong instinctive impulses. Thus cows and horses, after long confinement in stables, and dry feeding, are apt, when first turned out into green pastures, to devour the fresh herbage so greedily, that they frequently swallow plants which they would have rejected at another time, and in this way are sometimes poisoned. Linnæus pointed out this circumstance long ago, and remarked that, at Tornea, cows, on being allowed to go into fresh pastures at the beginning of spring, appeared to have lost the instinct which, under ordinary circumstances, prevents them from eating the water hemlock, and other poisonous plants. Dr. Fleming mentions that, in the Orkneys, goslings, when first turned out in spring, frequently die from eating the leaves of the fox-glove.

In man, the instinct which leads to the selection of appropriate food, is by no means so accurate as in animals; in the earlier periods of life the selection of food depends upon the parent, after this it is regulated, not by instinct, but by reason and experience. With respect to the peculiar sensation termed hunger, it is not necessary that I should enter into any detailed investigation of its cause, particularly as our knowledge on this point is both scanty and imperfect. By some it is attributed to the friction of the coats of the stomach on each other in the empty state of that organ; others look upon it as a consequence of the irritation produced by the accumulation of the gastric

juice in contact with, and acting on, its coats. Various other explanations of this phenomenon have been given, some of which are trifling, and all unsatisfactory. It would appear to arise from the sympathy which the stomach has with the whole system, as proved by the fact that in cases of disease of the pylorus, where assimilation does not take place to any extent, the patient may feel very hungry with a full stomach.

Where a supply of proper food cannot be obtained, various modes have been resorted to for relieving the sensation of hunger. Some persons allay the cravings of appetite by chewing tobacco and swallowing part of the saliva, others by smoking, and it is a fact well known to most nations, particularly the Irish, that the want of a breakfast may be less sensibly felt by the use of the pipe. Soldiers on long marches have been frequently known to seek for an alleviation of this sensation by holding pebbles in their mouths, and in many parts of the East the same thing is more completely accomplished by eating opium. Some of the native tribes in South America, whose supply of food is scanty and precarious, prepare a kind of aluminous clay, which they make up into balls, and swallow when pressed by famine. Many of the Hottentot tribes, and several individuals of other countries, who travel through the inland parts of Africa for the purposes of commerce or scientific investigation, carry with them what are termed famine girdles, these are worn over the loins and abdomen, and are tightened accordingly as their supply of food fails, experience having taught them that compression of the abdominal viscera is one of the most effectual modes of relieving the sensations of hunger.

With regard to the quantity of food which an individual is capable of consuming at a meal, this is chiefly regulated by habit. Europeans and most civilised nations who are accustomed to live regularly eat at certain times, and take a certain proportion of food, and if they should chance to exceed this they experience a sense of oppression about the stomach, and feel heavy and incapable of exertion. Among savage tribes, however, where agriculture and commerce are either totally neglected or but very imperfectly pursued, the supply of food depending on the uncertain labours of the chase, and the prey being frequently killed at a distance from home, a habit of devouring immense quantities of food is generated, and the savage, doubtful of the prospect for the next few days, concludes that the best and simplest plan he can pursue is to eat as much at once as will probably do until another chance of supplying his wants may occur. Thus it is related by a missionary in his Travels through Southern Africa, that on one occasion his party had been forced to tighten their famine girdles to the utmost, having been for several days without any kind of solid food, when fortunately a zebra was shot. The carcase was immediately

roasted, and, after he had eaten two or three pounds, he felt an inclination to sleep, and lay down at a distance from the party. During the course of the night he awoke, and found that the negroes were still engaged in stuffing themselves with unabated eagerness. He again went asleep and again awoke, and continued in this way, alternately dosing and waking, during the night, but remarked, with no small degree of astonishment, that every time he awoke the Africans were still eating away as if they had only just commenced. They had heaped fresh fuel on the fire, and taken off their famine girdles in the beginning of the night, and they lay stretched on the grass, gorging themselves until their bellies, which had been quite lank and concave, became strikingly protuberant and convex.

Capt. Cochrane, in his Journey through Russia and Siberia, relates the following facts, strongly illustrative of the influence which habit, climate, and hereditary disposition, exercise upon the human appetite and digestive powers. "At Tabalak I had a pretty good specimen of the appetite of a child, whose age did not exceed five years. I had observed the child crawling on the floor, and scraping up with its thumb the tallow-grease which fell from a lighted candle, and I inquired in surprise whether it proceeded from hunger or from liking of the fat. I was told from neither, but simply from the habit, in both Yakuti and Tongousi, of eating whenever there is food, and never permitting anything that can be eaten to be lost. I gave the child a candle, made of the most impure tallow, a second, and a third, and all were devoured with avidity. The steersman then gave him several pounds of sour frozen butter; this he also immediately consumed; lastly, also a large piece of yellow soap; all went the same road, but as I was convinced that the child would continue to gorge as long as it could receive anything, I begged my companion to desist as I had done.

"As to the statement of what a man can or will eat, either as to quality or quantity, I am afraid it would be quite incredible; in fact, there is nothing in the way of fish or meat, from whatever animal, however putrid or unwholesome, but they will devour with impunity, and the quantity only varies with what they can get. I have repeatedly seen a Yakuti or a Tongousi devour forty pounds of meat in a day; the effect is very observable upon them, for from thin and meagre looking men they will become perfectly pot-bellied. Their stomachs must be differently formed from ours, or it would be impossible for them to drink off at a draught their tea and soup scalding hot without the least inconvenience. I have seen three of these gluttons consume a rein-deer at one meal; nor are they nice as to the choice of parts, nothing being lost, not even the contents of the bowels, which, with the aid of fat and blood, are converted into black puddings."

Perhaps, gentlemen, you may be inclined to look upon this statement as grossly exaggerated; I do not believe it to be so, for it is fully corroborated by the following, taken from the narrative of the voyage made by the Russian Admiral Saritcheff.

"No sooner," says the Admiral, "had they stopped to rest and spend the night, than they had their kettle on the fire, which they never left until they pursued their journey, spending the intervals for rest in eating, and, in consequence of not sleeping, they were drowsy all the next day. Such an extraordinary voracity was never attended with any ill effects, although they made a practice of devouring at one meal what would have killed any other person. The labourers had an allowance of four poods (one hundred and forty-four pounds English) of fat, and seventy-two pounds of rye flour, yet in a fortnight they complained of having nothing to eat. Not crediting the fact, the Yakuti said that one of them was accustomed to consume at home, in the space of twenty-four hours, the hind quarter of a large ox, twenty pounds of fat, and a proportionate quantity of melted butter for his drink." The appearance of the man not justifying his assertion, the admiral had a mind to try his gormandising powers, and for that purpose he had a thick porridge of rice boiled down with three pounds of butter, weighing together twenty-eight pounds, and although the glutton had already breakfasted, yet did he sit down to it with the greatest eagerness, and consumed the whole without stirring from the spot; and except that his stomach betrayed more than ordinary fullness, he showed no sign of inconvenience or injury, and would have been ready to renew his gluttony the following day.

An instance of extraordinary appetite has been lately communicated to me by Mr. Mulock. A gentleman affected with psoas abscess, which opened in the usual manner, was greatly emaciated in consequence of the excessive discharge of purulent matter. He had all the symptoms of violent hectic, and was sinking rapidly, when, being given over by the late Mr. Hewson, he determined to gratify his desire for food, which had shortly before become inordinate. He accordingly took six meals in the day, consisting of beef-steaks, mutton, fowl, and, in short, of food the most nutritious, washed down with plentiful potations of wine and the strongest porter. Mr. Mulock, who watched the case very carefully, found that he consumed on an average sixteen pounds of solid food daily. The effects of this diet on his constitutional symptoms were very remarkable. His pulse became gradually slower and fuller, his strength increased, the colliquative sweats diminished, and he finally recovered perfectly. This and similar instances are full of instruction, and prove that fever may be a consequence of debility. The effects of a properly adjusted diet in diminishing fever of this

nature, I every day witness in the fever at present epidemic, *in the more advanced stages of which raving, very quick pulse, want of sleep, and a host of bad symptoms, often yield to wine and proper nourishment.*

Mr. Derwent Conway, in his "Personal Narrative of a Journey through Norway," makes the following remarks, well worthy of the attention both of the physiologist and the practical physician.

"In looking at the Norwegian peasantry, one is struck with their sturdy forms and healthy faces; notwithstanding the great appetites and daintiness of the Norwegians, and the artificial style of cookery practised among them, indigestion, with its train of evils, is unknown among them. I leave it to the physiologist to determine whether this be owing to acquired habit, or to constant exercise, or to peculiarities of climate; it is certain, however, that the traveller will in vain search the interior of Norway for a dyspeptic, and yet I am well convinced that the diet of a hearty Norwegian would create such an attack of indigestion in any inhabitant of my own country, as would put him on a regimen of water gruel for a month. In looking at a healthy population such as Norway, where diet is not more simple than it is in England, and excess in eating and drinking is far more general, we are led to conclude *that works on diet and regimen are less useful than they pretend to be*, and that we must look for the differences in health rather to certain refinements, luxurious indulgences, incident to a highly civilised state of society, than to the errors of diet. This may at least apply to the upper ranks. I am certain that one may see a greater number of *malades* in the city of Bath in one day than could be collected from every part of Norway. But if we were to transport a hundred of the inhabitants of Asterdalm to the gaieties of a London winter, with its refinements and artificial habits, though to quite as simple a diet, the change would soon make itself apparent in the enervated frame and languid faces of the Asterdalms. The converse of this I know to be true. I am well acquainted with a person, who in this island was a martyr to indigestion; nothing but the simplest kind of food could be eaten by her for years, and during all that time not one particle of butter had been tasted. But not many months after a removal to Norway, there was not a trace of dyspepsy left; she ate the same diet, and almost as much, as those among whom she had come, but along with this was coupled Norwegian habits, early rising, early hours, daily and nearly constant exercise in the open air."

Indeed, gentlemen, I have long been of opinion with Mr. Conway, that works upon diet are less useful than they pretend to be. I am in the habit of considering the stomach rather as a joint sufferer with the rest of the system, than as the cause of the disease itself.

Physicians in general are too much inclined to look upon those cases in which digestion is badly performed, as cases of mere disease on the part of the stomach, whereas, in the majority of instances, the stomach only participates in the effects produced by some cause which has debilitated the system in general, and consequently has weakened the powers of the stomach as well as those of the other organs. Loss of blood, mental anxiety, constant confinement and want of exercise, over exertion of mind, late hours, excesses in sensual enjoyments; these, and a thousand other causes, give rise to general debility, to an enervated state of the whole frame, including all the organs, the stomach among the rest. When such a result has been produced, how mistaken and narrow the views of those who only look to the state of the digestive organs, and who attribute to their derangement the origin of all the evils that afflict the patient! How unsuccessful must be their practice, who in such cases confine their attention to accurate rules of diet, and to medicines calculated merely to act upon the stomach and liver; how frequently, overlooking the true sources of the malady, do they aggravate the patient's suffering by the blue pill and purgative system! A man may have a stomach weakened in consequence of his suffering from peritonitis, which prevents sleep; his powers of digestion may be impaired in consequence of the reaction produced on the constitution by various local diseases, piles, cancer, ulcers, or by various general affections, as gout, syphilis, scurvy. It is obvious that in all such cases the indications for cure must be very different, and must extend beyond the mere rules of diet, or the selection of aperient and stomachic remedies.

I may remark, that, in some persons, there exists a ravenous and insatiable craving for food, constituting the disease termed bulimia. Something of this nature occurs in patients labouring under diabetes, they eat and drink both night and day, and hence they are by far the most expensive inmates of an hospital. In Dr. Thomas's Practice of Physic you will find some curious cases of bulimia detailed; among the rest is one of a person, named Tararre, who had recourse to the vilest filth to satisfy the cravings of an insatiable appetite, and who, among other things, was strongly suspected of having eaten a child. It may be observed here, that in such cases the functions are never natural. The discharges from the bowels and bladder are inordinate in quantity, and remarkable for their unnatural character, and there is an enormous evaporation of fluid from the skin, generally of a highly offensive odour. A singular species of bulimia exists among the West Indian blacks, and has been very well described in the *Edinburgh Medical and Surgical Journal*. Persons labouring under this affection have a desire to eat lime, ashes, earth, and other disgusting substances; the

disease is generally accompanied by a hard and tumefied state of the abdomen, and in some instances appears to be of an epidemic character. In chlorotic and hysteric women something analogous to this is frequently observed, the appetite for food becomes diseased and they devour various indigestible and improper substances. I have this day visited a young lady, who has manifested a strong desire for eating clay.

In some cases, on the contrary, the appetite for food becomes preternaturally diminished, and it is astonishing to think of the small quantity of aliment on which some individuals have existed for a great length of time. Instances are brought forward as wonders, of persons, particularly females, having subsisted for a considerable period without any food at all. You will sometimes hear of instances of young ladies having lived for months on such meagre aliment as lemon-juice. Thus Johanna Naunton is said to have lived on lemon-juice alone for seventy-eight days*.

I may, however, observe, *en passant*, that most cases of this description occur in the persons of hysterical females; and it is a curious fact, that some individuals have an extraordinary tendency to deceive their friends and medical attendants. Weak-minded persons of an hysterical habit, led away by an inordinate desire to cause pity and wonder, seek to become the subjects of some surprising story or miracle; and it is astonishing to see what inconveniences they will undergo in order to excite this temporary interest. Among the various modes adopted for accomplishing this, fasting is one of those most generally employed; and hence we frequently hear of females who have lived for months without taking any food. Cases of this description, and other instances of an analogous nature, are curious circumstances as connected with the strong tendency which exists in mankind to deceive and be deceived. A case is recorded by Dr. Otto of Copenhagen, in which it is stated, that needles to the amount of four or five hundred were extracted at various times from the arms and body of a female. This case was published in all the Medical Journals of Europe, and excited a great deal of attention, and certainly it must be acknowledged that this female succeeded completely in her purpose, for it appeared, on accurate investigation, that she thrust the needles into various parts of her own body for the purpose of exciting wonder and having herself talked of. I recollect a case somewhat like this, which occurred in the Female Orphan House in this city. One of the girls was attacked with inflammation of the fore-arm, and the symptoms were so violent that all treatment proved unavailing. Deep-seated inflammation of an intense cha-

* In Caillet's Account of a Residence among some African Tribes, the natives are represented as subsisting *almost altogether upon milk*.

rafter attacked the sheaths of the muscles and the tendinous expansions, and sloughing went on to such an extent, that the surgeon who attended the Institution finding the best-directed efforts of treatment unavailing, came to the resolution of amputating the arm. The operation was performed, and, on examining the limb, a vast quantity of needles were found in various parts, thrust deeply into the muscular mass which forms the bulk of the forearm. A case, still more extraordinary, is related in the Transactions of the Association of the King and Queen's College of Physicians in Ireland: it was that of a young woman from the South of Ireland, who was said to have vomited up the larvæ of several insects; indeed, it was stated by some physicians in Cork, on whom she had imposed, that she had discharged a winged insect, which, if it did not fly out of her mouth, was at least perfect in all its parts when ejected from her stomach! This extraordinary narrative, now ascertained to have been the result of gross but well-managed deception, has been frequently quoted by Continental writers, and has been suffered, uncontradicted, to disgrace the excellent work in which it was originally published! A case is also published of a woman who did not pass a single drop of urine for five months!

It is astonishing what pleasure persons of this description find in deceiving their friends, and what ingenuity they practise to support the deception. It is necessary for every practitioner to bear this in mind, for you can have no idea of the frequency with which attempts to impose, in a minor degree, occur among private families, and how often the friends of hysterical and hypochondriac individuals are thrown into a state of alarm by such practices. Again; such impositions frequently deceive the medical practitioner; and when detected, as they generally are, by accident or by the keener penetration of non-professional persons, they have a tendency to throw ridicule on the profession. I remember being brought, some time ago, by a medical friend, to see a woman, living at one of the gate-houses in the Phoenix Park, who was said to have passed the most extraordinary substance from the bowels. I procured some of the alvine discharges, and had the curiosity to go through the dirty task of lixiviating it, and insulating from the fecal mass the foreign substances blended with it. I found these to consist entirely of a quantity of gravel, which the impostor had picked up in one of the walks and secretly mixed with the fæces. Some of the larger quartz pebbles had been selected by the physician in attendance, who had them washed and preserved as specimens of gall-stones!

But to return;—without adducing examples of hysteric females, it may be stated that the greatest length of time which persons in ordinary health can live without taking any food, appears, from the most authentic accounts, to be about seven or eight days. Thus we find, in Franklin's account of his Journey, that Dr.

Drummond's brother lived for seven days without food (and this is generally the utmost length that total abstinence can be borne without producing fatal consequences). There is, however, one case on record of a person who survived until the eighteenth day. Such cases must be exceedingly rare, for in the normal condition of the system no human being can live without food longer than from seven to nine or ten days. Many of the inferior animals, as toads, serpents, tortoises, and insects during the chrysalis state, subsist for a considerable length of time without taking any kind of aliment, and the same thing may be observed in hibernating animals. In the latter, the suppressed state of the vital energy during the dormant period, and the very imperfect discharge of all the functions, seem to be the chief reason why their prolonged abstinence is borne with such remarkable impunity.

Long fasting, besides its immediate effects in reducing the bodily powers to a state of great debility, has a strong tendency to bring on a peculiar state of the system, in which the stimulus of food is apt to produce fatal effects by lighting up rapid and violent inflammation. Persons who, after long deprivation of food, have taken a hearty meal, very seldom recover from its effects. The same thing is to be observed of drinking a quantity of fluid after a long continued thirst. Thus Columbus states that several Indians who had been confined in his vessel and deprived of drink for several days, died almost immediately after swallowing a copious draught of water.

It is highly instructive to the practical physician as well as the enquiring physiologist; to consider what is the nature of those symptoms which arise from want of food, when continued beyond a certain period. I need not describe the sensation of distress and sinking, the total prostration of bodily power, the burning thirst, the strange type of fever, and the maniacal excitement produced by deprivation of food. You will find the effects of starvation depicted in all their appalling reality in the accounts given by many authors.

A few of the facts connected with symptoms of starvation, however, are in one point of view highly interesting, and demand a more particular notice. In the first place, continued deprivation of food produces (and this is a very singular effect) inflammation of the stomach. After some time this is followed by fever, and then furious delirium. Of these three important facts the latter is the most curious. In all cases of starvation one of the most invariable consequences has been *the occurrence of high maniacal excitement*. It is necessary to bear this in mind, because a knowledge of the fact enables us to look with a different eye on the apparently savage and demoniac acts of those poor wretches, who have been exposed to the horrors of starvation. In reading the sickening details of the wreck of the Medusa, it is some consolation to reflect

that the murders and atrocities, committed by the crew, were probably not the acts of accountable beings, but the ordinary results of maniacal excitement.

The following particulars, taken from a narrative of the sufferings of those who embarked on the raft, constructed to save the crew of the French frigate, the *Medusa*, presents strong proofs of the excitement of the delirium caused by starvation:—

“The second night was still more dreadful, and many were washed off into the sea, although the crew had so crowded together, that some were smothered by the mere pressure. To sooth their last moments the soldiers drunk immoderately, and in their fury attempted to cut the cables which held together the spars and beams of the raft; a general conflict ensued between those who attacked and those who defended it. Many of the former were killed, and one, who affected to rest himself upon the side, but who in fact was treacherously cutting the ropes, was thrown into the sea. Another, whom M. Correard had snatched from the waves, turned traitor a second time, he too was killed. At length the revolvers, who were chiefly soldiers, being repulsed, threw themselves on their knees, and with the utmost abjectness implored mercy; at midnight, however, they rebelled again. Those who had no arms fought with their teeth, and thus it was that many severe wounds were inflicted; one man in particular was most wantonly and dreadfully bitten above the heel, while his companions were beating him on the head with their carabines, previously to their throwing him into the sea. The raft was strewed with dead bodies, after innumerable instances of treachery and cruelty, and from 60 to 65 perished that night. The force and courage of the strongest began to yield to their misfortunes, and even the most resolute laboured under mental derangement. In the conflict the revolted had thrown two casks of wine into the sea, together with all the remaining water. A day of comparative tranquillity now succeeded. The survivors erected their mast again, which had been wantonly cut down in the battle of the night, and endeavoured to catch some fish, but in vain; then it was that they were reduced to the last resource, the most repugnant to human nature, and the bodies of their dead companions became their sustenance. A third night followed, which was only interrupted by the plaintive cries of wretches, exposed to every kind of suffering, ten or twelve of whom died of want. Some flying-fish were caught, which, mixed up with human flesh, afforded one scanty meal. A new insurrection, still for the insane purpose of destroying the raft, broke out on the fourth night, and this too was marked by perfidy, and terminated in blood; most of the rebels were thrown into the sea. The fifth morning mustered but thirty men alive, and these in the most wretched state, sick and wounded, and the skin of the lower extremities corroded

by salt water. * * * There now remained but twenty-seven; of these but fifteen appeared capable of out-living their present fatigue. A council of war was held, and it was resolved that, as the weak consumed a part of the common store without hope of surviving, they should be thrown into the sea. * * * In such a situation, distress and misery increased with a very accelerated ratio; and even after the desperate measure of destroying their companions and eating the most nauseous aliments, the surviving fifteen could not hope for more than a few days' existence. A butterfly lighted on their sail the ninth day, and though it was held to be the harbinger of good many a greedy eye was cast upon it. The misery of the survivors increased, and they even stole from each other little goblets of urine, which had been set to cool in the sea-water, and which was now considered a luxury.” M. Savary made some observations on this subject which are not devoid of interest, particularly when we combine them with the diuretic qualities lately ascribed to urea. He says that the urine of some was much more agreeable than that of others, and in all cases this beverage proved an instantaneous and powerful diuretic.

A curious fact connected with this subject is mentioned by Captain Cochrane, who says, “that nothing is so acceptable to rein-deer as human urine, and I have even seen them run to get it as occasion offered*.”

In modern times, national famines are of much less frequent occurrence than during the middle ages, when commerce was restricted and agricultural pursuits insecure. The greatest famine we ever experienced in England was in the reign of Edward II., in 1513, but even its horrors and devastations were exceeded by those which marked the occurrence of similar misfortunes in France, where, in 1031, under Robert, human flesh was sold in the butchers' shops.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XIX.

Labour.

GENTLEMEN,—We now come to the consideration of that process by which nature completes the great work of development in which she had been engaged for nine months previously, and by which she ushers into the

* Journey through Russia and Siberian Tartary.

world the new being, freed from the confinement of its mother's womb, and capable of prolonging that existence, the commencement of which has been involved in so much mystery. When we investigate the powers which are brought into action, and consider the changes which must necessarily take place for this purpose, the beautiful proportion of the passages to the body which has to be conveyed through them, and of the expelling powers to the resistance produced by it, we cannot but be struck with the evidences of benevolent design and adaptation which have thus been displayed, in rendering the process of parturition safe and healthy, which is apparently fraught with so much danger both to the mother and her child.

For the purpose of taking a clear and simple view of it, labour has been usually divided into periods or stages; by this means we are also able to refer to any part which we may be desirous of noticing. In the English schools, labour has generally been divided into three stages, the *first*, from the commencement of the pains to the full dilatation of the os uteri; the *second* commences when the os uteri is fully dilated, and terminates with the birth of the child; the *third* terminates in the expulsion of the placenta. In the schools of Germany, labour has been divided into five stages, and, although I am averse to any multiplication of arbitrary divisions, yet, as I think that this division not only assists in forming a more correct idea of the process of parturition, but is also more applicable in a practical point of view, I shall adopt it in the present lecture.

The *first stage* begins with the first perceptible contractions of the uterus; these have no effect upon the os uteri, and may continue two or four days, and, in some cases, may even last a whole fortnight, before actual labour commences. Properly speaking, they are not positive pains, but rather communicate a sensation of equable pressure round the abdomen. The uterus feels for a time hard and tense, and, in a state of health, they are accompanied by no pain, but merely by a sense of tightness or pressure; nevertheless, in a rheumatic habit, much actual suffering is occasionally produced; from preceding the commencement of real labour they have been called the *dolores presagientes*. "The first contractions are feeble, and communicate no sensation to the patient; in order to discover them, we must place our hand upon the abdomen, if we feel the globe of the uterus raise itself and become hard, this is a true contraction. These contractions gradually increase until they excite pain, but pain is not essential to a contraction; it depends on the distension and compression of the nerves, produced by the resistance of the body upon which the uterus acts, and increases in severity in proportion to the degree of resistance and contraction*." These pains generally

appear towards evening, and go off again as night advances.

The patient experiences repeated calls to pass water; there is a degree of restlessness and anxiety about her; she is never able to sit still or continue long in the same posture. In primiparæ, on examination per vaginam, you will not be able to reach the os uteri easily at this moment, it will be found high up in the hollow of the sacrum, forming a small circular depression, through which not even the tip of the finger can pass, being closed up with a plug of gelatinous matter. The head will be felt deep in the cavity of the pelvis, pushing the anterior portion of the inferior segment of the uterus before it.

In women who have already had children, the os uteri is neither so high up, nor so far backwards towards the sacrum; a small portion of the portio vaginalis of the cervix is still remaining, the os tinæ, or os uteri externum, is more or less open, and its edge uneven, thick, and somewhat hard in places from cicatrices, the result of former labours. In primiparæ, when the os uteri first begins to open, its edge is generally thin, sometimes so much so, as even to resemble thin parchment. By degrees it swells, becomes soft, and more capable of dilatation; it is warm, and continues slightly tense during the interval of the pains. "When the os uteri *does* dilate, it is not by its edges being stretched mechanically, it is by an absolute loss of power to maintain longer a state of contraction*." The vagina swells and becomes soft, followed by a copious secretion of inodorous mucus; the more albuminous it is the better, and it is always a good sign when lumps of albuminous matter come away from time to time; the thicker, softer, and more cushiony the os uteri is, the more mucus it secretes; its fibres being now more separated from each other than when it was thin, it becomes much more dilatable. Besides the lubrication of the vagina, this secretion of mucus before labour acts as a topical depletion to the neck of the uterus, vagina, and perinæum, and thus greatly facilitates their relaxation. This secretion is of great importance in promoting the healthy progress of labour, nor can you sufficiently estimate its value, unless you are aware of the consequences arising from its deficiency or absence. By frequent or incautious touching the glands, furnishing this discharge, are over stimulated and become inflamed, the secretion immediately ceases, the parts become hot, swollen, and tender, especially the mouth of the uterus if not fully dilated; the pains will become less frequent and less protrusive; the woman becomes restless, and enjoys no calm in the intervals of the pains; fever is excited, headach, thirst, and a hot skin follow; in a word, a new condition of the system arises, which almost supersedes the business of labour. It would be in vain under such circumstances to offer a

* Leroux.

* Dewees.

substitute for the lost mucous secretion by presenting to the part any unctuous or mucilaginous substance whatever; it can only be recalled by rest and free blood-letting*.”

As soon as the os uteri in primiparæ begins to open, or, in those who have already borne children, to be dilated, the *second stage of labour commences*.

The patient is now no longer able to conceal her pains when they come on. If she be walking about, she is obliged to stand still and catch hold of any thing within reach, or support herself by leaning against a chair, &c., until the pain has ceased. The pains are situated chiefly in the loins, not, as many works on midwifery say, extending from the fundus uteri down to the thighs. “In women,” says Wigand, “who have already borne children, the os uteri is at this moment much lower than in primiparæ; it is thick, soft, and cushiony, communicating to the finger a spongy feel. It is cool, hanging quite relaxed during the intervals of the pains, and so yielding, that two or more fingers can pass. The thin hard distended os uteri, at the beginning of labour, exerts a much greater resistance against the head than when it becomes thick and swollen, for, in the latter case, the fibres being separated from each other by the swelling, it becomes more dilatable.” During the intervals of the pains the fundus and other parts of the uterus upon external examination become softer and more compressible, the different parts of the child and its movements are to be felt, both externally as well as internally, more distinctly; the patient is free from pain, and feels herself in an agreeable state of quiet, which is frequently accompanied by a short refreshing sleep. The os uteri, which has become somewhat larger during the last pain, is soft and loose, so much so, that you may move it about with the finger; the presenting part of the child is now more moveable. The membranes, which had been distended and thrust down into the vagina by the liquor amnii, become loose, and retreat more or less into the cavity of the uterus, but immediately as the pain comes on, the os uteri becomes tense and hard, the whole uterus becomes hard, and the parts of the child which, during the intervals of the pain, were to be felt externally, now become indistinct; if the os uteri be thin, it will now feel so tightly stretched as to make you think it would rupture with the slightest violence, especially if little or no liquor amnii has collected before the head, which is now forcibly pressed upon it, or still more so if the membranes by any cause have been prematurely ruptured. If a quantity of liquor amnii has collected between the presenting part and the membranes, these become distended into a tight bag, which presses against the os uteri, and which, by the equable pressure which it exerts upon it during a pain, greatly facilitates its early

dilatation; in this manner the os uteri gradually attains its full degree of dilatation viz. to about two inches and a half in diameter, and when this is the case we may expect the membranes to rupture with every pain. At this point the second stage terminates.

The contractions of the uterus during these two first stages do not appear to be directed so much towards the expulsion of the child, but rather to *prepare* it, as well as the passages, for this purpose, by gradually arranging and regulating the different forces, and at the same time by giving such a position to the child, and such a degree of dilatation to the os uteri, as may ensure its passage with the greatest facility and certainty; they have been therefore called the *dolores preparantes*.

Upon examination, we find streaks of blood mixed with the mucus, which adheres to the finger, and this is considered as a proof of the os uteri being fully dilated; this appearance of blood has been called by the midwives a *show*, and is produced in part by a separation of the chorion from the edge of the os uteri, which therefore bleeds; at this moment a violent rigor or shivering is frequently observed, but it differs considerably from the common shivering which is produced by cold, in not being capable of being relieved by external warmth, and the patient will not unfrequently express her surprise that she should shiver thus violently and yet feel quite warm; it is a convulsive affection resulting from nervous sympathy between the muscles of the face and other parts of the body and the os uteri upon its having reached its full degree of dilatation.

The *third stage of labour* begins with the full dilatation of the os uteri and the rupture of the membranes; it is a remarkable fact, but you will find that the woman loses her patience more in the second stage than in the third, although in this latter stage the pains are much stronger and more severe; in the second stage the pain is chiefly confined to one spot in the loins, she has not become accustomed to the endurance of it, nor is she comforted with the feeling that it has been of any assistance to her, or that the progress of her labour has been at all advanced by it; but when the membranes have ruptured, a considerable change in the character of the pains follows; although more severe, they are nevertheless much more tolerable, the escape of the liquor amnii shows also that some real advance has taken place, and encourages her to bear her sufferings with patience and resolution.

These pains, gentlemen, are the *dolores ad partum proprii*, the real genuine pains of labour, for by their action is the presenting part compelled to quit the uterus and enter the vagina; the os uteri has disappeared entirely, so that the vagina and cervix uteri form one continuous passage; not unfrequently, however, its anterior lip dilates

* Dewees.

slowly, more especially in primiparæ, where the head at the beginning of labour has been situated so very low in the pelvis, and it will occasionally depend so considerably, as even to be felt between the labia; any attempts to force it up above the head are of no avail, they only tend to inflame the parts and make them swell; with a little patience it will gradually disappear of itself: those who suppose they can force up the anterior lip of the os uteri above the head under these circumstances, deceive themselves in their examination, or if it does actually yield, it is because the part itself would, in the course of a pain or two, have gone up spontaneously.

The sutures will now be felt riding over each other, and the fontanelles much diminished in size, and from the degree of pressure to which the head of the child is subjected, it becomes considerably elongated, and an œdematous swelling of the scalp forms upon the presenting part. The moment the head has cleared the os uteri and entered the vagina, the contractions of this canal not only become more powerful and of longer duration, but now also the abdominal muscles are called into action, and the vehement efforts which characterise the *fourth stage of labour* commence. We never see the really powerful straining pains come on (the head may be never so low in the pelvis) so long as the os uteri is not sufficiently dilated; the sympathetic connexion between the vagina and abdominal muscles is precisely the same as between them and the rectum; the moment the vagina becomes distended it begins to contract upon the distending body, and, like the rectum, excites the abdominal muscles to strong and involuntary action. This evidently does not depend upon the state of the os uteri, for in cases where this is pushed very low and yet not much dilated, the patient feels no impulse to strain, nor do these involuntary straining efforts depend upon the rectum being pressed upon by the head, as some have imagined, because in primiparæ we find that the head frequently occupies the cavity of the pelvis for some time before labour comes on. She wishes for the next pain, and yet dreads it; the face becomes red, swollen, and bathed in perspiration, her expression is hurried, her eyes are wild, and when a pain comes on she cries out in spite of any previous determination to the contrary; and I have known well educated females, women of strong mind, who had previously determined to be perfectly reasonable and quiet during these moments, but who nevertheless, when the time came, were irresistibly compelled to scream out; the face sometimes changes its expression surprisingly, so much so, that even her own attendants would scarcely recognise her; the pains increase, and the head now begins to be firmly pressed against the perinæum. During the pain no liquor amnii is discharged, nor also does it escape during the intervals, although

the works on midwifery assert that it does; the fact is, it escapes just at the moment when the pain is coming on or going off. The reason for this is obvious; during a full contraction of the uterus, the head is so firmly pressed against the soft parts as effectually to plug up the vagina; when the pain ceases entirely, the pressure upon the contents of the uterus ceases, and therefore there is nothing acting to expel it, hence, as I before said, it is merely at the beginning and end of pain that the liquor amnii has a disposition to escape. As the pains increase, a larger segment of the head becomes visible between the labia; during each pain it is thrust rapidly against the perinæum, which becomes greatly distended, and pushed out into a ball, and again slowly retires, not as the books say, gentlemen, because the cord is preternaturally short, or twisted round the child's neck or body; it is merely a result of the elasticity of the parts.

When more of the head has passed through it does *not* now recede, the perinæum is upon its greatest stretch, and is scarcely thicker than fine parchment, the next pain brings it, with the greatest circumference which it presents to the os externum, into the world; this is the moment of greatest suffering, and the head, as it passes through, is said to be in the *crowning, the caput coronatum* of the older authors.

An interval of comparative ease succeeds for a few seconds, and after two or more pains the shoulders and body of the child follow, and thus the fourth stage of labour is terminated. From their extreme violence, and from the great agitation into which the body of the patient is thrown, the pains during this stage have been called *dolores conquassantes*. The state of mind at this moment approaches nearly to a species of insanity, and shows itself in the most quiet disposition. Women who have been known as affectionate wives and tender mothers, have been guilty of words and actions the most outrageous and contrary to their natures, and at which they have afterwards been excessively shocked. Query—does the pressure of the abdominal viscera affect the circulation in the brain? This is a point of medical jurisprudence which does not appear to have been sufficiently noticed, and which is of great importance in cases of child murder.

At the birth of the child, a gush of liquor amnii, followed by a small quantity of blood, takes place. A delightful and perfect calm succeeds; in a few minutes pain of a slighter degree but of quite a different character comes on, and the after-birth or placenta soon follows. From the peculiar sensation which they communicate they are called *grinding pains*, it being apparently produced by the separation of the placenta from the uterus, or *dolores cruenti*, on account of the expulsion of the placenta being attended with more or less hæmorrhage. This discharge continues for several days after delivery, and is called *lochia*: at first it is called the *lochia rubra*, from the

mouths of the uterine veins being again uncovered by the expulsion of the membranes; thus permitting a portion of the colouring matter of the blood to escape, but as the uterus gradually contracts this discharge becomes colourless.

If there be twins, the second child enters the cavity of the pelvis in the third stage of labour; that is, the os uteri is fully dilated, and the parts prepared by the passage of the first child; the membranes form into a tumour and burst; and the whole is conducted precisely in the same manner as the birth of the first child.

There has been considerable discrepancy of opinion as to whether the placenta of twins are separate or not: some authors have affirmed that they are quite distinct, while others assert that they form but one mass. As far as I have had the opportunity of observing this point, I should say that when the placenta are sufficiently near each other, which is usually the case, the maternal portions, or that formed by the decidua, are continuous, whereas the fetal portions are distinct. Whether this be *always* the case is difficult to say: this has been noticed by Mauriceau and Portal, and, in some degree, by Levret. "If," says Mauriceau, "there be two children in the womb, they have commonly but one placenta, which has as many cords attached to it as there are children; nevertheless, they are separated from each other by their several membranes, in each of which the children are distinct with their liquores amnii.

So much, gentlemen, for the description of a natural labour. I might easily have rendered it more minute, but, by so doing, I doubt much if I should have rendered it more intelligible to you. Before concluding this afternoon's lecture, I must give you a few observations on the diagnosis of labour, and what are commonly called *false pains*. There is, perhaps, nothing of more importance to the accoucheur than to be able to distinguish with certainty when actual labour commences. Many women are subject, towards the end of gestation, to pains in the loins and bowels, very resembling those of labour: these have been termed *dolores spurii* or *false pains*, and are very apt to mislead the incautious practitioner. These pains vary considerably in their character; "they sometimes precede labour a few hours, sometimes several weeks, and generally harass most those addicted to the use of cordials*." The most frequent cause is flatulence, a spasmodic state of the bowels like colic, or irritation connected with costiveness or diarrhoea, especially after exposure to cold. If these pains become severe and constant, the abdominal muscles, or even the uterus itself, will frequently be observed to sympathise with them, and be affected with regular paroxysms of pain, during which they will undergo slight contractions and become

somewhat hard, as in actual labour pains. These appearances are so deceptive, that even women of considerable experience will suppose themselves on the very verge of labour. If the accoucheur examine the case more closely, and pay particular attention to the state of the os uteri (which, in fact, is the only means of ascertaining the real character of a labour-pain), he will find, that in spite of the pains and contractions to be felt externally actual labour has not yet commenced, the os uteri remaining closed and not participating in these changes. He will, therefore, be justified in considering that the contractions which he has felt in the fundus uteri are merely sympathetic with the colicky pains in the bowels, which, so far from showing the presence of actual labour, require to be alleviated by antispasmodics and such like remedies. In cases where flatulence seems to be the cause of these spurious pains, an ammoniated tonic, with a little tinct. opii or hyoscyami, will generally produce great relief. This requires, however, to be accompanied by some mild laxative, as the bowels are usually more or less loaded. A state of costiveness during pregnancy is best relieved by castor oil, confection of senna, or any such mild laxative, and the patient should be warned to pay strict attention to maintaining a due action in the intestinal canal. Where the pain is attended with diarrhoea which shows an inclination to assume the dysenteric form, blue pill combined with Dover's powder will have a beneficial effect. A little carbonate of soda or potash in cold water will relieve any acidity upon the stomach, which is frequently present in these cases, and serve to prevent the blue pill from griping: and if the tenesmus be at all troublesome, a starch enema with a small quantity of tinct. opii will be necessary. When, however, the uterus begins to sympathise with these various causes of irritation, and a hardness of the fundus is felt during the presence of the pains, a dose of liquor opii sedativus, or Dover's powder (as being preferable to common laudanum or crude opium), will prove a powerful antispasmodic, and cut short a state of considerable suffering, which might even have induced premature labour-pains. This is a circumstance most carefully to be avoided by the practitioner, because contractions of the uterus thus induced are very exhausting and inefficacious, and the labour is thereby frequently rendered exceedingly tedious and difficult. Not unfrequently the first contractions of the uterus, or *dolores praesagientes*, which, in a healthy state, produce little or nothing more than a sensation of equable pressure round the abdomen, in a rheumatic state of the uterine fibres are attended with very severe suffering, and produce a degree of irritation and exhaustion in the patient which cannot fail to do mischief.

These contractions of the uterus frequently come on as much as ten days, or even a fortnight, previous to the accession of actual la-

* Burns.

bour; and if, about this period, the patient has been exposed to the action of cold, or from any cause is liable to rheumatic attacks, the early part of her labour will be rendered unusually tedious and painful. These pains, like the other species of false pains above mentioned, have no effect upon the os uteri at first, but if their true character be not timely perceived, and the patient be treated as if in actual labour, a slight dilatation of the os uteri is produced, but, so far from continuing to advance, the progress of the dilatation soon ceases, and from keeping off the accession of real labour-pains, the patient becomes so exhausted, that, when actual labour does commence, she is too much weakened to make those exertions which nature requires of her. These pains being generally connected with a more or less accelerated state of the circulation, a venesection, followed by an opiate, seldom fails to give relief. Several hours of refreshing sleep are generally the result, and the patient wakes in a gentle equable perspiration, entirely free from pain.

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CLINICAL REMARKS ON THE OPERATION FOR CATARACT, WHEN ADHESIONS OF THE LENS AND IRIS EXIST, AND ALSO ON THE TREATMENT OF CONSECUTIVE HYPOPION.

BY CARRON DU VILLARDS, D.M.P.

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WHEN, before the operation of cataract is performed, the existence of one or more adhesions of the iris have been ascertained, very great precautions are necessary, for the operation becomes very difficult, so difficult indeed, that Richter regards it as very hazardous. I do not agree with him on this point, for provided that on the outer side, the place of election for the introduction of Scarpa's needle, a small portion of the iris be free, the operation may be successfully performed, by attending to the following rules.

1st. It is necessary to obtain the greatest dilatation possible of the pupil by means of the extract of belladonna, in order that the operator may be able to follow the movements of the needle with exactness and facility.

2ndly. Introduce the instrument as in the ordinary proceeding for depression, and carry it across the centre of the pupil, the point of the hook being turned downwards. Thence, if the adhesion be on the side of the great angle, the instrument must be passed on until it reach the band uniting the iris and the capsule. At this point the handle of the needle must be lowered, and the point raised, which is then to be carried gently on the adhesion, this latter thus coming in contact with the cutting point of the instrument. A few gentle movements backwards and forwards

with the hook will be sufficient to destroy the anormal bands which confine the iris.

This manœuvre, which is more easily performed than described, is almost always successful. It is to be repeated as often as there are bands to be destroyed; their destruction may be readily ascertained by the different forms the pupil assumes.

The advantages of this proceeding will be at once felt when it is stated, that Scarpa considered that whenever there were numerous adhesions between the iris and the crystalline lens or its annexes, depression ought not to be attempted. As soon as the lens has been freed from these anormal bands, it must be depressed according to the process of the Pavian professor.

There are, however, some glutinous lenses which can neither be depressed, nor reduced to pieces sufficiently small to be passed into the anterior chamber. In such a case, the crystalline must be broken into as many pieces as possible, and left to dissolve *in situ*; this recommendation was given in the year 1622 by Bannister, and published in 1683 by Barbette, in these words:—

“*Licet cataracta non satis intra pupillæ regionem sit depressa, dummodo in particulis sit divisa perfecta visio intra sex aut octo septimanas sc̄pissimæ redit, licet tota operatio absque nullo fructu peracta videatur: quod aliquoties experientia edoctus loquar.*”

CASE I.—*Adhesion of the Lens to the Iris; the former of a glutinous consistence; combination of the proceedings of Drs. du Villards and Barbette.*—M. Bauvais, seventy-one years old, an employé of the Countess of Osmond, was sent to M. du Villards by Dr. Chavernac.

This patient had had cataracts in both eyes for several years. The left had been operated on two years previously by extraction. The operation could not be completed, on account of numerous adhesions of the iris to the lens, and so many formed after the operation, that the iris and the lens appeared to be one substance.

Extraction of the cataract in the right eye appeared to be impracticable, and the operation of depression would evidently prove very difficult, on account of three very appreciable adhesions, which rendered the iris very irregular. The operation was performed in the presence of Drs. Chavernac, Therrien, and Brauzeau.

The first part of the operation was performed with the precautions already indicated, but scarcely was the needle directed to the performance of the second, than the crystalline lens broke into several pieces, without, however, any evident separation, and so that it was impossible to displace any portion with the needle. It was, therefore, broken up, and left for absorption. A few weeks sufficed to remove it entirely, and now the patient can see very well.

I had an analogous case in Madame Bertrand, residing in the Rue Basse du Rempart, in whom the phenomena of absorption were preceded by attacks of very painful intermittent neuralgia of the supra-orbital nerve.

Sometimes, after the operation for the extraction of a cataract, a purulent collection forms in the anterior chamber, which, under certain circumstances, makes itself a passage through the cicatrix, which it ruptures and deforms, and frequently causes a loss of vision; it were better, in such a case, that the surgeon should himself give exit to the retained pus; he may do it very readily by raising a small portion of the semi-adhering flap with the gold spatula of Forlenze. The pus escapes easily, the patient is relieved, and some time after a few drops of warm distilled water may be injected into the anterior chamber.

But when this purulent hypopion forms after the complete cicatrization of the cornea, a slight puncture must be made in this membrane, in order to evacuate the pus. This little operation ought to be practised with great precautions on the outside of the old incision, either with the lanceolate knife of Daviell, or the instrument of Jaeger for artificial pupil. It is the only measure that can be adopted to save the eye from the consequences of suppuration. The advantages of this proceeding were illustrated by the following case:—

CASE II.—*Double-dry siliquose cataract—Extraction performed on each Eye—Consecutive Hypopion—Puncture of the Cornea—Cure.*—Mr. Warms, an American, a native of Cincinnati, in the United States, was sent to me by M. Carneys, of Cadiz, on whose daughter I had operated for congenital cataract. This gentleman had two dry siliquose cataracts, the consequences of a violent blennorrhagic ophthalmia.

The operation was performed a few weeks after his arrival, in the presence of Messrs. Schmit, Bennati, and Brauzeau. Although I only operate on one eye at a time; in this case I was obliged to give up my usual custom, in compliance with the express wish of the patient. Although the extraction of the cataract of the left side was performed with some difficulty, in consequence of a band, which was destroyed with the kistótome; it was successfully accomplished.

Twelve days after, the patient having been very imprudent, a violent inflammation of the iris of the right eye took place; the intensity of the inflammatory symptoms was arrested, not without difficulty, by energetic measures, but a purulent exudation, in the anterior chamber, ensued, which caused considerable alarm, and required the eye to be punctured, which was done with success. The anterior chamber was twice injected with warm water, and the patient got perfectly well.

ABSTRACT OF AN ESSAY ON THE USE OF SEDATIVES IN MANIA MELANCHOLICA, ETC., ETC.

BY J. HORNE, ESQ., M.R.C.S.

Read before the Royal Medical and Chirurgical Society, Jan. 13th, 1835.

MR. PRESIDENT,—After this subject has been so ably introduced to the Society by Dr. Seymour, I feel that so young a member of the profession as myself may be considered presumptuous in renewing it. A consciousness of the immense benefit resulting from the plan of treatment, proposed by Dr. Seymour, is my apology, and I trust I have some claims to speak of its merits, having adopted it in preference to all others since 1830, and since which period a very considerable number of cases have fallen under my observation. The form of sedative, selected by the Doctor, is the pure acetate of morphia; I have chosen one which contains a very large proportion of the acetate of morphia in solution, and which I propose calling the *acetum opii sedativum*, as it will be found to be the same as, or at least very similar to, Mr. Battley's *liquor opii sedativus*, a remedy too well known to require description, except in regard to its mode of preparation, which the proprietor, in spite of the honour of ranking as a scientific chemist, has hitherto kept a profound secret.

[The substance of the observations, which follow has been already given in a preceding number, in a communication from Mr. Horne, headed "*Acetum Opii Sedativum*." These, therefore, we omit.]

Medical men are frequently consulted in cases of mania melancholica, arising from grief, vexation, or disappointment in love, and the dearer the object the deeper is the impression, the more difficult is it to be overcome. Mania not unfrequently sets in after females have undergone considerable fatigue, or kept late hours at balls, or have suffered from cold and fatigue combined, during menstruation. During this predisposing condition of the system fever ensues, and rapidly increases; the brain becomes affected, the secretions are arrested, hour after hour passes away without any rest. The mind, which at first only wandered, is now entirely lost. At this stage of the complaint the ceremony of taking leave of their friends, of dying, and of being buried is performed over and over again, or the constant fear of being murdered, or placed in solitary confinement in a madhouse constantly haunts them. All past actions appear to have been one continued scene of wickedness, from the commission of which it will be utterly impossible to escape everlasting punishment, or to make atonement.

The high degree of nervous irritation, producing these maniacal symptoms, has been combated by the profession with narcotic remedies; but, upon the whole, our medical

110. *Abstract of an Essay on Sedatives in Mania Melancholica, &c.*

writers consider that little reliance can be placed upon them. Experience, sanctioned by so great an authority as Dr. Seymour, will not allow me to attribute this want of success to the narcotic, but rather to the manner in which it is prescribed, due attention not being paid to these agents possessing two distinct properties, like the preparations of digitalis, that is to say, first stimulant then sedative, so that unless the dose of the latter be sufficiently large to counteract, or overcome the former property, that only will come into action, and this class of remedies would of course increase rather than mitigate the nervous irritability under which the system labours.

CASE I.—In the early part of February, 1831, I was requested to visit a lady, aged 18 years, labouring under this affection in its severest form. She had a wild and suspicious look, her eyes almost starting out of their sockets; she complained of the slightest noise; there was also pain in the head, with very dilated pupils, and indistinct vision; the tongue dry and coated; lips black; skin parched; pulse 135, small and weak, and respiration hurried. Insomnolency was a prominent symptom. She had been confined to her bed for ten days, and had taken a great dislike to all her attendants, deplored her unhappy condition, and dreaded the punishment that would be inflicted for her past supposed sins. Her friends were all in the greatest state of despondency, having given up all hope of recovery; two eminent physicians, who had been previously consulted, not having formed a favourable prognosis. I abstracted eight ounces of blood from the arm, and gave immediately thirty minims of the acetum opii sedativum, applied cold to the head, and supported the system by weak broths. The blood drawn exhibited slight inflammatory traces; the acetum opii sedativum was repeated throughout the first, second, and third days, at intervals of every three, four, and six hours, with well-marked benefit, and the pulse was kept down by digitalis. Three days and two nights passed by before sound quiet sleep could be obtained, and for the space of nearly two months the opiate was repeated at bed time, and also during the day, whenever the wandering, or melancholic mood, was on the increase, in varying doses from ten to twenty minims. The lady is now perfectly recovered.

A few weeks after a second case, presenting precisely the same symptoms, excepting the condition of the circulation, which was more excited, owing to this patient being more robust in constitution and habit than the former. Here the sedative proved most beneficial. At the commencement digitalis, with powerful diuretics, were employed to reduce the system, aided by occasional purgatives.

In chronic cases the same satisfactory results may be depended upon from the sedative plan of treatment; and, in further proofs of its efficacy, I may add the case of an elderly lady,

nearly 50 years of age, who became melancholic from reading religious tracts. I was consulted; and though well aware of the difficulty of successfully combating this form of melancholia, when arising from religious fanaticism, more especially as she had poverty to contend with, and but few friends to assist her, I considered it would prove a most favourable case for testing the efficacy of the treatment. Neither trouble nor expense on my part was spared, and my efforts were crowned with success, for my patient completely recovered, and in time became capable of following her religious inclinations with perfect safety. The dose of the sedative was twenty minims night and morning, gradually reduced to ten. The cure of this case stamped the efficacy of the treatment most completely on my own mind.

Other cases might be narrated, but as I am fearful of trespassing too much on the valuable time of the Society, I shall only relate one, belonging to the class of puerperal mania, which occurred in July and August, 1834.

I was requested to attend a poor girl, about sixteen years and a half old, whom I found in strong labour-pains. Parturition took place without much difficulty, and the child was strong and healthy. Up to the fourth day the patient was doing well; at 11 p.m. of the same day I was sent for by her friends, who were respectable, who reported that their daughter, towards the evening, began to talk excessively, and very strangely, quickly wandering from one subject to another; had attempted several times to get out of bed, but on being prevented at first quietly lay down by degrees, but she never ceased talking, and reasoning had no effect on her. On my arrival, I found two persons were required to keep her in bed; her exclamations were dreadful, and the manner in which she described the despised and degraded condition to which she had become reduced, and the helpless state of her child, will not be readily forgotten by me. The excitement had quickly developed high febrile symptoms; the pulse was 140 (rather more than less); the skin and fauces dry and parched; the head and the surface of the whole body were hot; the breasts distended with milk; the bowels had been relieved in the early part of the day.

This sudden change, I ascertained, had arisen from her parents' having inadvertently declared their incapability of keeping her and her child, and the only comfort they held out was the workhouse or starvation. I directed a wineglassful, to be given every two hours, of a mixture containing half an ounce of laudanum and ten ounces of water; the breasts to be drawn; lemonade drink during the night.

2nd. Symptoms increased; no sleep; the laudanum to be continued.

3rd. Worse; pulse sinking; bowels much relaxed.

Capiat tinct. opii ʒj. statim, et cochlearia larga duo 4tā quaquā horā misturæ sequentis.

R. Tinct. opii ʒij., aquæ ʒvi.—fiat mist.

4th. More composed; has enjoyed some sound sleep; to be supported by nourishing broths and milk; the opiate to be continued.

6th. Melancholia; expresses an ardent wish to die: pulse 70 and small; bowels confined.

Capiat pulv. jalapæ c. ʒij. statim.

Habeat mist. opii ut antea.

8th. Better; sleeps more composedly.

10th. Rapidly improving.—Continue the opiate.

13th. Convalescent; regained strength slowly, but her health has continued good up to the present time. The lochia were encouraged by warm fomentations, and were consequently unchecked; the milk returned in part as the mania decreased. In this case laudanum was given, because it contains spirit; considering it would prove beneficial rather than injurious on that account, on the ground that this class of patients are accustomed to spirituous stimuli, and its total deprivation not unfrequently retards the cure very considerably.

When insanity first develops itself in young persons, it is almost invariably accompanied, as in case the first, with well-marked symptoms of cerebral inflammation, and not unfrequently no inconsiderable tact will be required to arrive at a correct diagnosis. However, by attentively ascertaining the previous state and habits of the patient, and, if possible, the propensities, the true diagnosis may be formed, which it is of the greatest consequence to establish as early as possible.

Dr. Seymour, in his valuable paper, proposed to trust almost entirely to the sedative plan. My experience, small as it may be, compared to that of Dr. S., and with all due deference to the exalted rank he holds in the profession, enables me, with perfect confidence as to the result, to make it my sheet-anchor; but it also justifies me in adding, that there are two conditions of the circulation, a previous attention to which gives the narcotics an advantage and a power over melancholic insanity and puerperal mania, that no other class of remedies possesses. The first condition of the circulation to which I allude, is where we find, as in case the first, the action of the heart excessively quick, but the pulse weak, and in proportion to the time the circulation has continued unchecked, the greater is the weakness to which the patient is apparently reduced; the circulation, to use a common but appropriate simile, has the upper hand; by bleeding we relieve, consequently diminish the exhaustion, for the pulse falls, but becomes fuller, softer, and more dilated, the most satisfactory proof that the oppression has been in part removed. The second condition of the circulation alluded to is that

where the whole vascular system, from repeated indulgences and various excesses, too common and distressing to describe, especially when young, has reached its maximum of distension or dilatation. Under these circumstances, the necessity of reducing the powers of the system must be too evident to require demonstration.

Reviews.

Observations on the Causes and Treatment of Ulcerous Diseases of the Leg. By J. C. SPENDER, M.R.C.S. Pp. 210. Longman. 1835.

THE author, in writing the preface to this work, appears to have had two objects in view, one to dissuade the public from thinking him *egotistical*, the other to demonstrate that his work is not altogether devoid of novelty. How far he has succeeded our further analysis must endeavour to show.

In the commencement of the first chapter the author attempts to prove, that ulcerous affections of the lower extremities are not by any means referable to their dependent position, or remoteness from the centre of the circulation. The first thing, after exploding one theory, is to frame another, not always a better; and this he sets about in good earnest, but with bad success. He believes the cause of the evil is to be found first in the fact, that the inferior extremities are more exposed to the effect of external violence, as ulcers occur more frequently in men than in women, and among those who are employed in laborious and mechanical occupations; and, secondly, "in a positive and palpable unhealthiness of the outer structures of the leg, consisting of a varicose state of the superficial veins, either alone or combined with adventitious deposits, which are most generally the products of such varicose state." In attempting to prove the latter position he quite contradicts himself; for, after having spoken of the formation of the varicose valves, in preventing the retrogression of the blood, and endowed the veins themselves with a capacity of dilating, or diminishing, their calibre, according as a greater or less quantity of blood has to pass through them;—he says, "Now, from these two circumstances combined, viz. that the blood has to rise contrary to its gravity, and that the veins are endowed with a capacity for dilating themselves," &c. If he considers the circumstance of the blood *having to rise contrary to gravity* as a cause of the varicose condition, and thus of the disease of the legs, he must refer it primarily to their "dependent position." But he commenced by denying that the dependent position had any influence, whereas he has himself proved that it has a very great one, viz. in obliging the blood to proceed "contrary to gravity," and thus he has proved himself to have denied a fact which he subsequently admits. He

appears to have been aware of this inconsistency, and has added a note, but we must confess that, in our opinion, he has only made "confusion worse confounded."

In the classification which he offers of ulcers, he disapproves of the practice of arranging them according to their external appearance, and distributes them under two general heads, viz, those which possess and those which want the varicose affection. We fear that this is generalising a little too far; but on this point we will not quarrel with him.

In the remarks he offers on the treatment of ulcers, he appears to view the practice of others in a most contemptible light. According to his statements ulcers, of whatever description they may be, are indiscriminately "wrapped up in a poultice."

We give the following extract as an illustration of his views of the practice of his contemporaries:—Page 90. "Nothing has ever astonished me more than to see the frequency with which patients, who apply to me with bad legs, have the limb *wrapped up in a poultice*. Cases of the most opposite description, young and old, recent and long standing, irritable and indolent, exuberant and callous, are all subject to this indiscriminate remedy. I have been in the habit of recording what kind of application is found on every sore when I first examine it; and I see the result is, that out of a hundred cases sixty-one, considerably more than one-half, were covered with the *poultice*, whilst some of the others, though not using it at that particular time, had employed it at a former period. I have seen many legs in which this treatment had been pursued for years; a pretty convincing proof, by the way, that such a proceeding is not calculated to do any good."

A few pages further we are favoured with the following comment upon the fastidiousness of the medical attendant. "It is really difficult to assign any other cause for the frequent and indiscriminate use of such a remedy, than the disinclination to do anything which will soil the fingers or offend the nose. We can order a poultice, and even prescribe a fomentation, or lotion, and yet stand at a very agreeable distance,—shifting off on other hands the local treatment of the disease, instead of executing it by our own. It is, however, very clear, that if the performance of what ought to be done strikes us with disgust, though it may be allowable to dislike it, yet if the aversion prevents us from doing our duty, we are inexcusable for pretending to undertake the management of the case at all."

We leave it for our readers to decide whether or not this is the practice in our hospitals, or amongst liberally educated medical men. With every disposition to do justice to the work, we must say, that the author appears to have overstrained his mode of treatment. We think his practice is very good and no doubt very successful, but yet we do not see that it lays claim to any great originality, or that it has

any material difference from that taught in the various schools, and practised in the different hospitals in the metropolis.

The work before us is not likely, we apprehend, to be read much by the scientific portion of the profession, inasmuch as the opinions it professes to promulgate are pretty well known to them already. We fear the perusal of it will, in a great measure, be confined to those who have hitherto been in the habit of *poulticing* on all occasions, and who would probably have continued so to do unless reminded of the "evil of their ways" by the timely publication of Mr. Spender's work.

The London Anatomist;—Anatomical Plates Parts I. to IV.—or, *a System of Anatomy, Physiology, and Surgery combined.* By G. D. DERMOTT, Lecturer on Anatomy, &c. No. 1. pp. 93. Oct.

Had we space for a long review, we might probably endeavour to estimate the character of the author as a teacher of anatomy, as well as a political and a theological controversialist, but as a discussion of the two latter topics would neither enhance the reputation of Mr. Dermott in his profession nor interest the readers of this Journal, we shall waive them, and therefore refer only to his anatomical productions before us.

The anatomical plates naturally come first, from their priority of publication. The present plate is the *fourth*; it presents a very clear view of the *inferior angles* of the neck, with the muscles, vessels, and nerves; the vessels and nerves of the axillæ, fore-arm, and hand, the subcutaneous veins at the head of the elbow, with their relations to the cutaneous nerves, and of the median basilic vein to the brachial artery, are accurately depicted and superbly finished.

The *first plate* presents the structures of the head and neck in a similar manner, and the *second and third plates*, those of the inferior extremity. The letter-press is on distinct sheets.

When we say that they are exceedingly good plates, we offer no small meed of praise; but in justice we must add, they excel all that have been "got up" in this country; in addition the price is very moderate.

The "London Anatomist" will remind an old student of the "London Dissector," but we must inform him that they are very opposite works. The latter contains a concise description of the different structures of the body displayed by dissection, the former comprises a full view of anatomy, descriptive, general, and surgical, with physiology and morbid anatomy.

With descriptive and surgical anatomy Mr. Dermott is well acquainted; he could not have taught the subject so long without being so. For those who have not heard Mr. D.'s descriptions, we shall extract a small portion, and without comment or selection. His physiology we do not admire, for he is warped by

some peculiar and intangible notions; he will enter too deeply into the labyrinth of nature; he is fond of exploring in the dark recesses, and thus often loses himself in perplexities; he looks more deeply than his senses can penetrate and behold.

How great may be Mr. Dermott's experience in morbid anatomy and surgery we are not aware, nor is it our business perhaps to inquire, but we shrewdly suspect it is not vast.

This is the first number: to how many the work will extend does not appear. It contains—what do you think, reader?—in the Introduction, "Observations on Reviewers," in which he states, that if dealt with unfairly, he claims a reply—on the concours, on medical politics, &c., &c. This we regret to see; it is greatly misplaced.

The first chapter is on the "Physiology and Development of Bone, with its Diseases." At page 17 we observe an error:—"On the outer surface of bones," he says, "is a thin membrane continued uninterruptedly over the whole skeleton. It is rather tough, whitish, and is called, from its situation, the *periosteum*. It is a cellular membrane of a certain degree of condensation, and therefore it is of the serous kind."

We thought that the periosteum was alike in structure to the dura mater, the ligaments, and fasciæ; that it was a *bonâ fide* fibrous structure, and not a serous: this is the opinion of the Continental and best British authors. They are all cellular tissue woven into layers or cords, essentially the same in structure and properties. The *serous* is an elastic, transparent, shining structure, very unlike *fibrous*. In the chapter on "General Anatomy," which is likely to appear in the next number, we would suggest the author to remember this little point.

Chapter the Second is an "Introduction to the Bones of the Cranium." Then succeeds the "Descriptive Anatomy of the Bones proper and common to the Cranium."

"The *general uses* of the occipital bone are—to form, and close in, the posterior and inferior part of the cranium; to support and protect the cerebellum and the back of the cerebrum; to transmit the spinal marrow; to give insertion to the more powerful muscles moving the head, and protection to the conflux of the larger sinuses of the dura mater.

"It is absolutely necessary to be familiar with the position of the tubercle at the back of the head, and to be able to calculate upon the relative distance of the sutures from that point, as well as of the depressions upon the inner surface of the bone which give lodgment to the projections of the brain, and the sinuses of the dura mater. It would be extremely difficult to trephine upon the internal crucial spine; observe that the bifurcation of the superior longitudinal sinus, the centre of the internal crucial spine, is opposite the tubercle: that the transverse limb of the latter spine,

and the lateral sinuses, are opposite to the superior transverse ridge. At these parts the bone is consequently very thick; this is evidently a provision of nature to protect the larger veins of the head, and is in correspondence with the manner in which the large vessels are protected, in the muscular parts and the limbs, by the bones.

"The occipital bone at *birth* consists of four portions, which are formed from four centres of ossification, and held in connection by intermediate membrane. One ossification comprehends the tuberos process and the larger superior part, or body of the bone; in the lower parts or sides of this fissure are often seen. Two others are at the condyloid processes, and form considerable portions of the foramen magnum, as well as rather more than the posterior halves of the foramen condyloidea antica. A fourth ossification constitutes the basilar process. Early in utero-gestation, the superior portion instead of being formed from one centre of ossification, is really composed of four, which, rapidly coalescing, constitute the tuberos processes, whence the fibres subsequently spring as from a common centre of radiation.

"Additional centres of ossification are frequently generated towards the edge of the bone, which either become blended, as they extend, with those that are regularly formed, or are left insulated by a serrated suture, and then termed *Ossa Wormii* vel *Triquetra*; they are generally, however, not triangular.

"*Connections*.—The occipital bone is connected, *superiorly* (the lateral and superior edges), to the posterior edges of the two parietal bones, and to the *Ossa Wormii*, should they exist, by the *sagittal suture*: *more laterally and inferiorly* (the lateral and inferior edges), to the mastoid and petrous portions of the two temporal bones, by the *additamenta suturæ lambdoïdalis*. The *anterior part of the basilar process* is connected, previous to maturity, to the basilar process of the sphenoid bone, by an intermediate cartilage or *synchondrosis*; and, subsequently to the period of maturity, by a coalescence of osseous substance, that is, a natural ankylosis or *synostosis*; and, lastly, the *condyloid processes* are articulated, by *ginglymus*, to the superior oblique processes of the atlas."

With this extract we close the review, wishing Mr. Dermott every success in the sale of his work, which it eminently deserves, recommending him at the same time to avoid prolixity in his descriptions, and particularly to avoid long names.

Reports of Societies.

MEDICO-BOTANICAL SOCIETY.

February 10th, 1835.

CHARLES JOHNSON, Esq., Lecturer on Botany at Guy's Hospital, was elected a Fellow of the Society.

Mr. Iliff, of Newington, presented a drawing of the rock on which the fungus *Melitenis* grows, and some of the tincture made from the fungus. He also presented some specimens of the galangal and zedoary roots.

Some specimens of the kinogambier were announced as presents from Mr. Reece, and there was also on the table a specimen of the official tincture of kino, in its proper condition, and of some which had assumed a completely gelatinous form.

Dr. Sigmond, the senior secretary, made some remarks relative to the kino, galangal, and zedoary. He observed that a different source was assigned to the kino by the framers of the three Pharmacopœias,—the Dublin Pharmacopœia considering it to be a production of the *butea frondosa*, the Edinburgh of the *eucalyptus resinifera*, the London of the *pterocarpus erinacea*. Its origin appears to be involved in great doubt; and, as it is a matter of considerable interest, it had engaged the attention of the two great botanists of India, Drs. Roxburgh and Ainslie, who, however, had left the matter undecided. It should seem that the substance now in the market is the product of the *nauclea gambier*, from India, while others again consider it to be the inspissated juice of the brown gum-tree of Botany Bay. While examining the tincture prepared by one of the London chemists, the Doctor was surprised at perceiving a peculiar appearance one specimen presented, and which he was informed was not unusual, and, when it happened, the tincture was considered *effete*.

The specimens which were on the table of the good and bad tinctures were then passed round. The good had a peculiar astringency and a strong alcoholic taste; it was perfectly liquid and transparent. The bad preparation had a similar colour, but was completely gelatinous, had lost its astringent taste, and retained only partially its alcoholic flavour. It was stated by the chemist who furnished these specimens, that this gelatinous condition was considered to be owing to the cold weather, the tincture having been made immediately previous to such a change in the weather; but this, it was remarked, could not be the only cause, as it would sometimes occur when the atmosphere was warm. The kind used in preparing both specimens was taken from the same parcel, and proof spirit was in each instance employed.

The Professor of Chemistry was called upon to explain this peculiar condition of the tincture, but he stated that it was impossible to do

so without making an analysis, as it would be scarcely worth while in the present instance, as the source of the kino in the market was unknown; it would be, in fact, operating on a substance of which no one knew anything.

[We feel inclined to suggest to the Professor of Chemistry that some advantage might be derived from an analysis in the present instance, inasmuch as, although the knowledge of the composition of the kino would be of little avail while we remained unacquainted with the plant which produced it, yet by analysing the good and bad tinctures, and ascertaining their proximate principles and their ultimate elements, the cause of this peculiar change might be discovered.]

Dr. Sigmond then proceeded to make some remarks on the specimens of the galangal root which had been presented to the Society. He states that there were two species, the greater and the less, both of which were employed in India in cases of dyspepsia and some other stomachic complaints, but the lesser galangal was more highly prized than the other variety. It is considered to be warmer, and more fragrant: it is much used in India, China, Sumatra, and Japan. In the three former countries it is indigenous, and cultivated in the latter. The lesser variety is brown externally and reddish internally, the larger brown externally but of a dirty-white colour internally; the larger may also be distinguished from the other by its having rings on its external surface about a quarter of an inch distant from each other. The root is tuberoso, has an aromatic odour, and a pungent taste, like pepper and ginger combined. It is employed in the form of infusion. M. Robert procured starch from the lesser galangal.

Of the zedoary, there are three distinct plants, of the class and order monandria, monogynia, namely—the zedoaria *Kœmferia*, the zedoaria turmeric, and the zedoaria *zerumbet*. M. Robert has discovered starch in all these. He said it was considered at Malta to be an excellent astringent, but he himself did not place much confidence in it. It is employed either in the form of tincture or electuary.

Dr. Sigmond afterwards read a part of an essay, written by a German physician to compete for the gold medal of the Society. The question for the solution of which the medal was offered was,—What vegetable substance has been found most efficacious in the treatment of cholera? The essayist appears to depend on the *spiritus terebinthinæ*, combined with the liquor Hoffmanni, and the tinct. opii. In the paper a great deal of skill and acumen was displayed. The author alluded to the atmospheric changes for some time previous to the invasion of the epidemic; he also describes the class of diseases prevailing endemically or epidemically before the appearance of the cholera, and seemed to draw from these the conclusion that cholera was an affection of the spinal cord or nerves. In one part a

parallel was drawn between the symptoms of this disease and those exhibited by well-recognised spinal complaints, and the semeiology appeared to tally tolerably well, although it was not quite accurate.

[It is rather a curious fact that more works have been written on spinal diseases within the last few years than at any other antecedent period.]

It was announced that at the next meeting Mr. Everitt, the Professor of Chemistry, would make some observations on the preparation of atrophine, and that Mr. Hanham would detail his plan of preparing plants for herbaria.

LONDON MEDICAL SOCIETY.

Monday, February 16th, 1835.

W. KINGDON, Esq., in the Chair.

Hermaphrodites.

WE should not notice the meeting of this Society on last Monday, if the medical discussion had been the only object of interest. As an adjourned debate, on a case narrated partially the previous week, and continued but not completed on the 16th, it would not afford sufficient data to interest our readers, or consequently to warrant our inserting any notice of the proceedings.

But in the course of the evening, Mr. Stephens produced two young pigs, one of which he considered to be a specimen of hermaphroditism. On examination, the female parts of generation appeared to be well developed, and immediately in front of these there were two tumours contained in a cutaneous envelope, but not separated from each other by a raphe. The integuments enclosing these projections were not in any way wrinkled, and appeared to be simply a continuation of the skin of the abdomen. The tumours were considerably larger than the testes of the pig at the age of that under examination; they did not present any glandular feel, but gave rather a sensation as if a thickish membrane was being pressed between the fingers; considerable pressure on them did not cause any great indication of pain, but gave a jingling noise, as if something were receding from beneath the fingers. The tumours could be returned into the abdomen, and the finger readily followed them through the abdominal rings. Their cuticular covering then appeared to be decidedly nothing more than a lax portion of the integuments of the abdomen. By causing the pig to squeak and struggle, the tumours were again protruded. There was not any penis, nor even the rudiments of one. From these data, the conclusion seemed to be universal that the animal was a female, labouring under double hernia, but in no respect a hermaphrodite.

DR. CAMMACK ON THE USE OF SEDATIVES IN PUERPERAL CONVULSIONS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—The following case may perhaps interest some of your readers, as showing the advantage that may occasionally be derived, even in puerperal convulsion, from a full dose of an opiate, after due attention has been paid to emptying the vessels, &c. Every case, however, has some peculiarity of its own; and this having occurred *after*, may perhaps be considered as differing from convulsion *previous* to, delivery.

Mrs. Walker, a delicate woman, the wife of a labourer, aged 23, was delivered of her first child by Mr. A. Foote, on Sunday night, the 28th Sept. last, at half past eleven, after an easy and natural labour of ten hours' duration. Nothing particular occurred during the labour, except that during the last few pains, which were rather severe, her screams were violent, finishing with an agitated giggle. The placenta came away about ten minutes after the birth of the child, and Mr. Foote remained in the house nearly an hour afterwards, leaving her in a very comfortable state.

Soon after one o'clock he was sent for in great haste, with intelligence that she had fainted. On arriving she was quite composed, but with her pulse quick and feeble, her countenance pale, and every symptom indicative of exhaustion. He made an examination, but found there was no flooding, as he had apprehended, to possibly cause such symptoms. The uterus, however, being flaccid, he removed several coagula; and applying friction externally, and a shawl moderately tight round the hips, succeeded in producing full contraction of that organ. Mr. Foote sat by the bedside for some time to ascertain if there was anything more to account for the symptoms described to him; as, on cross examining the different parties who were with her, he could get nothing further from them than that she "had tossed up her arms suddenly and became like a ghost." At half past three, when about leaving the house, he was hastily summoned again to the chamber, and found her in a state of strong puerperal convulsion, which lasted several minutes. Her friends objected to his taking away blood, which had been immediately proposed. He sent for me, and blood was then taken from the arm to the amount of eighteen ounces, so as to produce a sensible effect upon the pulse, reducing it from 120 to 86.

R. Hydr. submur. ext. coloc. co. āā. gr. iv.
M. fiat pil. ij. s. s.

R. Tinct. hyoscyami ℥ij.
M. ammon. arom. ℥iss.
Mist. camph. ℥vss.

M. cap. ℥j. tertiâ quâquâ horâ.

29th. 8 A.M.—A fit of convulsion has returned at intervals of about an hour and a half. After each return of the convulsion there is a degree of coma, which continues some minutes before it begins to subside. She complains of pain in the head; the face is flushed; pulse 120; she is very restless.

Abrad. caput.

Applic. hirud. xij.

Adhib. lotio frigida cap.

Capiat hydrargyri submur. gr. ij. 4t̄s.

R. Ext. hyoscyami gr. xij.

Mist. camphoræ, ℥ ij.—M. fiat mistura.

Capiat ℥ ss. urgente inquietudine.

The bowels were copiously evacuated in the middle of the day by means of an enema; and at 4 P.M. my brother, Mr. Robert Cammack, introduced the catheter and drew off two pints of thick turbid urine.

8 P.M.—The convulsive fits continue to come on at intervals of an hour, followed by increased coma; pulse 120 and harder; the face is flushed, and she is complaining of her head. The lancet was again used; taking eight ozs. of blood produced a very decided effect on the pulse and system, so as not to allow of more being abstracted. Sinapisms were applied to the inside of the legs, and a blister to the nape of the neck.

30th. 8 A.M.—The convulsive fits still continue to return with unabated violence, followed by coma; the pupils are fully sensible to light as they had been yesterday, though the introduction of light into the room does not seem to make any impression upon her. The head continues hot, and she complains of occasional darting pains in the forehead. The tongue is coated and dry; pulse 88 and rather oppressed; there is great restlessness. A vein was again opened and eight ounces of blood abstracted. The effect it had on the pulse was very decided, rendering it extremely soft and weak. The blood does not exhibit any particular inflammatory appearance.

Applic. hirud. x. cap.

Cont. lotio frigida.

R. Hydr. submur.

Jalapæ āā. gr. iv.

M. fiat. pulv. s. s. et post horas duas exhib. enema domestica.

Cont. hydr. submur. a. a.

1 P.M. The convulsions continue to return in the same way. She is very restless in the intervals, and now perfectly insensible. She has had a copious watery evacuation. The pulse is 100, small and feeble; head not so hot; face flushed; tongue coated with a light brown fur.

R. Ext. hyoscyami,

Camphoræ, āā. gr. iv.

Aq. ℥ x.—M. fiat haust. s. s.

After taking the draught she became less agitated for a short time, but the convulsive fits recurred as usual.

3 P.M.—The convulsions, especially of the muscles of the face, have become more frequent and protracted. During the intervals she is excessively restless, tossing about in every direction. The pulse is 120 and feeble; the breathing is become stertorous; the skin hot; the pupils readily contract. There is no lochia or secretion of milk; the bowels are freely open. Further depletion appeared altogether inadmissible; the convulsed and agitated state of the system seemed to be rapidly wearing out life; and the only plan to be pursued at this moment appeared to be, if possible, to check it.

R. Tinct. opii, ℥j.

Aquæ ℥ x.—M. ft. haust statim sumend.

Cont. hydr. submur.

The tincture to be repeated in two hours if not more tranquil.

8 P.M.—She has had a continuance of coma since four o'clock; and, except when the fits have come on, which have not been so violent, has remained quiet, but with an almost incessant convulsive twitching of the muscles of the face. The countenance flushed; the skin hot and dry; the tongue furred; the pupils acutely sensible to light on bringing a candle near the eyes; the stertorous breathing is greater; the pulse 120 and harder. It was at first thought right to again use the lancet, but the pulse, on sitting by the side of the patient, was found to vary so much, at one time fuller and harder, and again softer and rather less frequent, varying from 100 to 120, that the application of twenty leeches to the head was preferred. The cold lotion and submuriate were continued, and forty minims of the tinct. opii ordered to be repeated if much restlessness returned.

Oct. 1st. 10 A.M.—There has been no fit since last night at eleven; the pulse is 90, soft and compressible; tongue furred. She is very restless; the convulsive motions of the face are chiefly confined to the muscles of the mouth; the pupils are still equally sensible to light; the bowels have not been relieved.

Cap. statim ol. ricini, ℥ ss.

No urine having been passed since yesterday, the catheter was again introduced, and Oss of dark fœtid urine removed.

Cap. tinct. opii, ℥ xxx. formâ haustûs.

In the middle of the day the pulse became 80, small and compressible. The oil not acting, an enema was exhibited. There was now some drawing up of the legs, which was partly attributable to a feeling of soreness from the sinapisms.

7 P.M.—Great irritation has come on in the intestinal canal, with frequent bloody and slimy evacuations. The convulsive motions of the face are diminished; the respiration is improved; the pulse 96, and more wiry; the head hot; the pupils equally sensible to light; the general restlessness not so great. Ten leeches were applied to the left temple, on which side the heat of the head was greatest;

they bled freely, and reduced the pulse to 86, rendering it much softer. Fomentations were ordered to the body.

Omit. hydr. subm.

R. Conf. aromat.

Sodæ carbo. āā ʒj.

Mist. camphor.

Aq. cinnam. āā ʒij.

M. fiat. mistura. capt. ʒj. 4tis horis.

R. Hydr. c. cretâ, gr. v.; fiat pulv. inter sing. mist. dos. s.

Oct. 2nd. 8 A. M.—The pupils are this morning dilated, and but little sensible to light; the pulse 86, small and regular; the heat of the head is less, and the state of the respiration much improved, but she is still perfectly insensible. The last evacuation has been nearly natural.

Cont. med.

App. emp. canth. pone aures.

8 P. M.—The pupils are more sensible to light than in the morning; the pulse 90, small and compressible; there is great restlessness; the evacuations are dysenteric and frequent; the tongue is furred.

R. Ipecac. gr. j.

Hydr. c. cretâ, gr. iv.

M. fiat. pulvis 4tis horis c. ʒj.

Mist. seq. s.

R. Ol. ricini, ʒvj.

Vit. ovi. q. s.

Aq. cinnam, ʒv.

M. fiat. mistura.

Oct 3rd. 10 A. M.—After the exhibition of the enema amyli last evening a disposition to sleep came on, and the restlessness was much abated. The pulse is 96 and compressible; the pupils appear natural. She is sensible to passing impressions this morning for the first time since the early part of the morning of the 30th, though not collected; the tongue is furred; the feet are cold, which they have not been previously. She complains of pain in the abdomen, upon pressure, and in her head. The motions are more natural but frequent.

The feet were ordered to be wrapped in warm flannels, and bottles of hot water applied.

Appl. abdom. hirud. x.

To take the powders and mixture every six, instead of every four, hours.

Oct. 4th. 10 A. M.—She is more sensible this morning, but has no recollection of her delivery, or of any thing that had occurred a few days before it,—wishing “it was over,” and wondering “when it would be.” She has passed her urine freely, and had two natural motions.

5th. 10 A. M.—To-day, after passing a good night, she continues mending, with the tongue gradually becoming cleaner. The breasts are now painful with a plentiful secretion of milk, but there is no lochial discharge. From this time

she continued gradually to become more and more convalescent till her perfect recovery.

The result of the case was very satisfactory, inasmuch as the decided effect of the opiate, in quieting the convulsive action, was very evident, at a time when the danger appeared to be not only imminent, but so great as to render the chance of recovery almost more than hopeless.

Should you, on looking it over, think it worth insertion it is very much at your service.

I am, Gentlemen,

Your obedient servant,

THOS. CAMMACK, M. D.

Spalding, Feb. 10th, 1835.

OBSERVATIONS ON MR. BARNARD'S
COMMUNICATION OF “GONORRHŒA
FROM MENSTRUATION.”

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,—A correspondent, in No. 156 of your valuable Journal, gives a description of two well-marked cases of gonorrhœa, but his explanation of the origin of the disease seems to be contrary both to experience and to reason.

In the first place, I am not aware of any cases on record of gonorrhœa being attributed “to the irregularity of living, and great disturbance of the menstrual function, the fluid becoming vitiated in quality, and acting as a morbid poison.” As your correspondent states that similar cases have been “noticed before,” he certainly will very much oblige me by referring to them. Upon questioning, too, all practitioners on the subject, I ascertain that they have never heard of the disease having been contracted in this manner, neither have they seen any such cases during a long series of very extensive practice. Referring to a lecturer on Midwifery and the Diseases of Women and Children, a person of great experience, concerning the probability of the disease ever being produced in this way, I am still further confirmed in the opinion that nothing less than the distinct specific—gonorrhœal virus—can communicate the disease.

It would have been much more satisfactory, and have attached a greater apparent authenticity to the facts stated, had your correspondent given the reasons of his conviction that they did not proceed from direct application of gonorrhœal virus. He says “the foregoing cases, I am convinced, did not arise from a female labouring under gonorrhœa,” &c. &c. Now, in order to be *convinced* that neither party had been exposed to the poison, requires very strong evidence indeed. He has given two cases of gonorrhœa; and what can we infer from the above sentence, than that one female (“a female”) communicated the disease to both the males? If this were the fact

our suspicion as to the origin of the disease would be greatly verified, and I would say that the disease had its origin in the latter, from direct contact with gonorrhœal virus lodged within the vagina of the former, and which had not produced any effects upon the female, for we well know how particularly some persons are predisposed to the disease more than others; and we have frequently seen cases of gonorrhœa arising from connexion with females who have not been aware, at the time, of one single symptom of the disease existing within themselves, and who have not communicated the disease to others less predisposed to it. We can only account for these circumstances, then, *by the difference of predisposition existing in different persons, and the capability of gonorrhœal matter within the vagina communicating the disease, although it had not manifested any of its usual effects on the female.*

The above are the conclusions I should be inclined to adopt, did one female communicate the disease to both males; but to suppose that one person, in whom there might be varied interests for concealment of the disease, communicated the virus in these two cases, is incompatible with your correspondent's conviction, that she was not labouring under gonorrhœa. If there were *two females* concerned, as I suppose there were; if they are married, and sufficiently impressed with a sense of moral rectitude to prevent their exposure to a chance of contracting the disease—in fact, of unimpeachable character, I should, then, be doubtful with reference to the *gentlemen*. How often do we see men with gonorrhœa, who most solemnly declare having had connexion with no other persons than their wives! They feel very anxious about their condition, and inquire very innocently as to the nature of the disease, and how it could have possibly occurred; yet, on positively declaring to them the disease, and the impossibility of its having been contracted in any other way than by direct connexion with persons affected with it, we may often infer, from their undecided answers and manners, the true nature of the cause; for there is no MAN who, under these circumstances, would still persist in vindicating his own character to the reproach of that of his innocent partner. I merely mention this fact as a fair specimen of a great number of cases. It matters little to medical men whether the disease were contracted in this or that way, if a patient come to him labouring under gonorrhœa or syphilis; and they would as soon attribute the origin of the latter to the menstrual discharge "vitiated in quality," &c. &c., as of the former.

We have sometimes seen slight excoriation and irritation of the part produced by the leucorrhœal discharge, but not gonorrhœa, and I should be inclined to suppose that the discharge in leucorrhœa, scirrhus tumour, polypus, cauliflower excrescence, and confirmed cancer of the uterus, would be more

capable of producing gonorrhœa in the female, than any altered condition of the menstruous fluid, but I have never heard of any such occurrence.

In the second place, it is reasonable to conclude that were this disease able to have been communicated in this way, we should, ere now, have had an abundance of cases to have testified the menstrual fluid as a "morbific poison" enabled to produce gonorrhœa; if this was the case, gonorrhœa would be a frequent occurrence from any "disturbance of the menstrual function," from "bad habit of body," &c., and the virtuous husband's blissful prerogative of freedom from a disease more deservedly attached to the *débauché*, would, in a great many instances, be annihilated. This chain of argument might be carried to a great length, but as I have so far (and a great deal farther than I intended when I commenced), I must now conclude, by negating the former query of your correspondent; the latter was unnecessary; we know that gonorrhœa is communicable from person to person, and of course if a man have gonorrhœa, however it may have originated, he is capable of communicating it to a female. Then I would say, that a man, from having had connexion with a woman during the period of her menstruation, cannot afterwards, from that cause, be affected with gonorrhœa, and I am not aware of any cases on record likely at all to require an opposite conclusion.

I am, Gentlemen,

Your obedient servant.

T. H. B.

London, 10th February, 1835.

THE

London Medical and Surgical Journal.

Saturday, February 21, 1835.

VIEWS OF THE GOVERNMENT WITH
REGARD TO THE COLLEGE OF
PHYSICIANS.

In our last number we observed, that the Government contemplated to amend so far the code of laws of the College of Physicians, as to render the admission of Licentiates more easy, and to increase the number of Fellowships, making the latter open to all Licentiates without the necessity of a Collegiate degree. We then remarked, that the examination for the licence, to be effective, should be both theoretic and practical, no reference being made to the place of study, or the in-

terests of any particular school pandered to; all that should be required of the candidate being a satisfactory proof of his thorough capability for the profession.

One important portion of the good emanating from such a state of the law would be the facility with which those among general practitioners, who might wish to receive fees instead of sending in a bill of charges for medicines, &c., could obtain the degree and consequence required; for many, as the law stands at present, though desirous of obtaining the degree, and amply qualified, so far as knowledge is concerned, are unable to fulfil their wishes, owing to the innumerable obstacles, in the forms of bye-laws, flung in their way. The usual mode now adopted by an individual of the above description, is, to gallop down to Edinburgh, leaving his business here in probably uncertain hands, and while there to pursue a system, which, while it cannot improve his knowledge, drains deeply his finances. To be obliged to con over again what one is well acquainted with, is no pleasant task, and certainly ought not to be enforced, where the applicant is ready to undergo a searching and effective examination.

But then it may be questioned whether the present amount of examination be a sufficient test of capability, and with great justice, for assuredly the few questions now put, and answered in the brief space of an hour, cannot be considered a satisfactory scrutiny in so grave a subject. The examination, to be efficient, should not be that of a day, or even a week; the theoretic portion, indeed, might be despatched in one or two appearances of an hour's duration, and should of course precede the practical, which should be the *argumentum crucis*. This latter should be long and rigid, and might be commenced by requiring the candidate to

attend in one of our dispensaries, there to receive and treat a stipulated number of patients, and to describe both their cases and treatment in writing. The term of this trial might be extended as circumstances seemed to require from one week to a month; at the conclusion of which another examination should take place, the subject of which might be the cases just attended by the examinee. In this his motives for his treatment should be narrowly canvassed, and accurately explained. On his properly acquitting himself a final trial should be decreed. In this a certain number of difficult and complicated cases, selected in a hospital, should be placed under his care, and the management of them noted as before by competent judges. Perhaps a week of such discipline would be sufficient, when his concluding examination taking place, a clinic on each case should be required, and, if approved, the licence granted. Such a mode of proving the candidate's ability would be at once a shield of protection to the public against the fangs of ignorance, and a mark of excellence in the College; solid benefit would thence accrue to its members, and their credit for capacity, now more than apocryphal, become re-established.

That a more rigid enquiry into the qualifications of candidates, than that adopted at present, is called for, we believe none, excepting perchance an old Fellow of the reigning regime, can be hardy enough to deny. To talk is easy, to practise is difficult; verbal examinations without practical exemplifications are easily *gotten up*, and to render them public, as some have thought advisable, would not render them more effective,—for public examination upon scientific subjects, when the credit and often the fair prospects of the examined are involved in

the result, cannot be equally just as respects individuals; the weak nerved and timid, though well prepared, may easily be distracted, and rendered for the time confused, while those of the iron strings successfully repeat their task,—this view of the question would make it in some degree one of animal courage and not scientific acquirement.

In divinity, before a degree is granted, the scrutiny into the classical and theological attainments of the candidate is protracted, and in the first step of A. B. severe; a long term of preliminary study, under the most favourable auspices, is demanded. Here, as words are the means by which the Divine administers his function, a verbal examination is deemed sufficient; but in our art, the application of which consists of operations and of tangible forms in various combinations, it does not follow, that because the words, which express the manner of such operations, or the modifications and tendencies of various medicaments, are remembered and pronounced, the practical tact is possessed; but without that tact there is no utility. A man might with little labour read a lecture upon the structure of a watch, or other engine, who could not put in order any misadjusted part of it, or indeed discover where the error lay. A man might commit to memory the members and positions of any complex apparatus, and undergo an examination, proving him acquainted with the same; but dismember the machine, and placing its component pinions, levers, and wheels isolated before his eyes, require him to restore its integrity, and his confusion would quickly become manifest. It is so with our art, its value to society exists but in its practical application, to which theory is only the handmaid, and shall we longer, rejecting the substantial part and grasping

at the shadow, leave to empty sound that of which both the eye and the ear should alike judge; in a word, shall we make our examinations tests of practical ability, as they ought to be, or merely proofs of what a strong memory and a tolerable stock of assurance can do?

It may be objected by some who think it as fair to conceal ignorance as to display knowledge, that the plan now sketched will be too great an innovation on our established usages, and that we ought to have recourse to a practical investigation of the candidate's competence. To these we answer, it is the only mode in which a fair estimate of his ability can be arrived at, the only mode in which justice, so far as the College of Physicians is concerned, can be administered to the public, and the only one which can give our now lame and halting science that impetus it has so long wanted, and which will make it progress, *pari passu*, with the intelligence of those after all most benefited by its advancement—the people.

REMARKS ON THE METHOD OF PRESCRIBING.

THE state of the law in England respecting venders of drugs and chemicals, is so loose and ineffective, that any one so inclined may adopt the business, no other qualification being required than the pecuniary means; and, owing to this oversight in legislation, by far the majority of our chemists and druggists are destitute of any peculiar qualification for their trade, knowing, in many instances, little or nothing of the nature of the drugs they retail. We say the majority, for we would not, as some of our contemporaries have done, include all in one sweeping accusation of ignorance. Doubtless there are among them a few possessing education, experience, and a thorough know-

ledge of their business, and to such the dispensing of prescriptions may be trusted with safety; but as this only happens to a very select number indeed, it behoves the medical profession to be as explicit and careful as possible in the wording of their prescriptions, in order that they may be comprehensible to the small intellects of those who may have the compounding of them.

We have been led to make these observations from noticing, under our head of Foreign Medicine, last number, the precautions which the Prussian authorities take to prevent any mistake happening in the dispensing department. In their Pharmacopœia appears a table pointing out the largest dose of certain medicines which ought to be administered, and forbidding any increase of such dose, unless in cases where a properly qualified physician deems it advisable, and then requiring him to affix a note of admiration (!) to such increased quantity. This is a regulation which confers an immunity from consequences upon the dispenser, should he send the overdose, and fixes the physician and his note of (!) with them; on the other hand, should the chemist venture to infringe without this staff (!) of safety, he is liable to all the cudgelling which may ensue. It would be a curious and not uninteresting subject for investigation to examine into the doses from time to time administered at certain of our metropolitan hospitals, and confer on them, according to the above systems, their proper marks of distinction; for instance, some enormous doses we have heard of might vindicate to themselves at least a brace of these (!!) worthies, while a glorious *ne plus ultra* of (!!!) might marshal in those unheard-of increasing potations of poison which have been swallowed with impunity, *mirabile dictu*, by patients

endowed with more than the antidotic power of Mithridates. Surgery might also come in for a note or two, and a long cut in one direction might well deserve to be commemorated with a couple of short ones (!!) in another. Seriously, however, seeing the depth of ignorance into which our Pharmaceuticals are plunged, it would be no bad plan to append notes of admiration to every dose of a medicine which, by giving an over-quantum, might become poisonous. This would sharpen their senses, and induce them to look twice before they leaped once. We should not then hear of a dose of tinct. opii being substituted for one of tinct. opii camphorata.

THE ARISTOCRACY OF THE BRAIN.

PHRENOLOGY, whether well or ill founded, has at least had the merit of making the human head an object of careful study, and of calling attention to many facts, which were previously either altogether overlooked, or very slightly attended to. Of its contributions in this way to the science of human nature, we had an interesting specimen in a phrenological journal. It is a communication from an eminent London hatter, containing the results of his own experience, and of two or three others in the trade, respecting the varieties of the human head presented by different classes of the community, and different provinces in the country. The subject is extremely interesting, and it is one upon which the testimony of the London wholesale hatter is of unquestionable value. They cover the heads of a great proportion of the provincial, as well as the metropolitan inhabitants, and as there are hats especially made for particular classes, such as sailors and livery servants, whilst the price of the others indicate the rank of the persons who wear them, there can be no doubt that they have it in their power to gauge the brains, not only of the single individuals, but of the various classes of the population. The paper, we ought to state, is entirely of a practical nature, and may rather be considered as a contribution to the natural history of man, than to phrenology.

"The brain," says the prince of living physiologists, "is the material organ of thought." "The volume of the brain is generally in direct proportion to the capacity of the mind." The only way of estimating the volume of

brain in a living person, is to measure the dimensions of the skull; every other means is uncertain. Setting phrenology aside then, and speaking simply as physiologists, it will be seen that we have two important facts upon the very best authority; first, that *size of brain is an indication of mental power*; and, secondly, that *the interior bulk of the head corresponds with the bulk of the brain*. Now the latter gives us the horizontal girth of the head, and this, though it does not include the depth, we know affords a pretty accurate measure of the actual magnitude. If Magendie speaks the truth, therefore, those persons have the means in their hands of *gauging* not only the *heads*, but, to some extent, the *intellects*, of all the people whose heads they cover.

Hatters' measure, the writer informs us, is the mean between the longer and the shorter diameter of the head. Thus, a hat, the cavity of which is 8 inches long by 7 broad, is said to be $7\frac{1}{2}$ inches' diameter, *hatters' measure*. The blocks for manufacturing hats are made on this principle, varying by 1-8th of an inch from 5 inches, the hatters' diameter of an infant's head, to $7\frac{3}{4}$ that of a man's fullest size. The varieties of size of English made hats range from $6\frac{1}{2}$ to $7\frac{1}{2}$ inches of this measure, the medium and most general size being seven inches. The range of the females heads is from $6\frac{3}{8}$ to $7\frac{1}{2}$. The reader must not think that the difference in heads is trifling because the interval seems to be small between these extremes; if he takes the trouble to calculate the cubic contents of two brains, of the diameter of $6\frac{1}{2}$ and $6\frac{3}{8}$ inches, he will find that the proportions are as 25 to 46, or that the one is almost twice as large as the other. The London hatters supply hats of all qualities for the inhabitants of the metropolis, but the coarse hats used in the country are chiefly made in Manchester. The writer of the article has therefore the means of judging as to the heads of both the rich and poor in London, and he has the means of comparing the heads of the upper and middle classes of London with those of the same classes in the country. Take seven inches as the medium size for all England, he finds, 1st, that the upper classes in London have heads above the medium size; 2ndly, that the lower classes have heads below the medium size; and, thirdly, that the middle classes have heads of a size intermediate to the two. We give the statement in his own words. "Commencing with London, a perceptible difference will be observed between the higher and lower classes of society. In the former, the majority are above the medium, whilst amongst the latter it is very rare to find a large head. This is easily proved by the different qualities of hats in requisition by each, in the manufacturing of which a distinct difference in the scale of sizes is observed. Taking the two extremes of society, this rule will be found invariable throughout the country, the middle ranks of

life forming a medium between the two. Establishments at the west end of the town, confined exclusively to the service of the higher circles, require more large hats in proportion than other hatters, whose trade is confined to the middle ranks; and again, the business with the lower class presents the same relation to the class above them, requiring a greater proportion of small hats than either of the other classes. These statements can be proved in a variety of ways. Take the average size of livery hats for servants, the scale will be found less than for their masters. The sizes observed in furnishing a regiment of soldiers are easily ascertained; seafaring men, and individuals connected with shipping and on the water, wear a peculiar hat, the dog's hair hats worn by carters, waggoners, and the labouring agriculturist, the round crowned shoulder-hats, in use by coalheavers, corn porters, &c, and the common plaited hats in general request by the working classes, present great facility for judging of general measurements for the lower orders, in all of which, as compared with the finest hat made, there is a striking and manifest difference. In the lower ranks of life, the majority are below the medium of 7 inches, and the higher classes of society above it. Not only difference of size is observed, but also a variation between the two classes exists in the circle of the head coming in contact with the hat, so as to influence the measurement. The upper portions of the head, comprehending the reflective faculties, ideality, and caution, come in contact, to increase the general circumference of the hat, in the higher classes of society; but the same effect is not observed in the lower walks of life; the circle round the head, in immediate connexion with the basilar region, the hat resting upon, or covering, the ear, will show that the size is more to be ascribed to that portion of the head than to the upper region. The slanting off of the lateral superior circumference much decreases the general measurement. The weavers of Spitalfields have extremely small heads; $6\frac{1}{2}$, $6\frac{3}{8}$, and $6\frac{1}{4}$ are prevailing sizes. In Coventry, almost exclusively peopled by weavers, the same facts peculiarly are observed.

"We have next to notice the provincial varieties. In the counties lying north and north-east of the metropolis, Hertford, Essex, Suffolk, and Norfolk, the head is smaller than any other part of the empire. In these counties, the medium size for all England is a full size, and a man in the maturity of life is often found with a head only as large as that of a boy of six years of age. In Kent, Surrey, and Sussex, the heads are larger. In the interior counties, proceeding towards the west, and in Wales, Devonshire, and Cornwall, they are above the medium London size; but the northern counties, Yorkshire, Lancashire, Cumberland, and Northumberland, produce a greater number of larger heads than any other part of England. The full

size, which in England is $7\frac{1}{2}$, is here enlarged to $7\frac{3}{4}$, and even 8 inches, and what is a large size in Essex and Hertfordshire is below the medium, and almost a small size in Scotland. The scale of measurement in furnishing hats for a Scotch regiment is larger than an English one. The writer acknowledges that he is not acquainted with all our provincial varieties, but he notices the fact, that in orders sent to London from Aberdeen, an unusual number of large sizes is required. The following anecdote is related between the Scotch and London heads of the lower classes:—‘A manufacturer at Manchester received an order from a London house to send off immediately a peculiar quality of hats. Having the same description of hats ready packed for Scotland, he sent off that packet promptly to oblige his London correspondent, without any regard to the sizes, to the metropolis. To the mortification of the individual to whom they were invoiced, they proved to be perfectly unsaleable, from the whole of them being very large in size.’”

These facts, in themselves, are unimportant; many will say it is of no consequence whether a man has a few ounces of brain, more or less; but when we connect them with the doctrine laid down, in such distinct terms, by the first phrenologists of the day, they evidently conduct us to some curious conclusions. Looking, for instance, at the varieties of fortune in the world, we are apt to regard life as a lottery, and to consider the wealth and the grandeur of one man, and the obscurity and poverty of another, as the result of positive laws, of accident, or of some causes little dependent on his personal qualities. But when we find the large heads at the top of society, the small ones at the bottom, and the middle ranks occupying the middle place in the cranial scale, we discover the operation of a principle in what seemed to be the mere effects of chance and destiny. We must apprise the reader, however, that bulk of head, according to phrenologists, is not to be received as a token of intellectual talent only. It may arise from a great development of animal propensities, of avarice, of the combative disposition, &c.; but in one shape or another it denotes *power*—that is, *power* of intellect, of sentiment, or of passion. Men of small intellect sometimes build up princely fortunes; but these men possess force of character; they act under some feeling, which directs all their powers into one channel, and that channel leads to wealth,—perhaps through meanness or crime. Persons of great intellect, again, often squander their patrimony, because their mental energy seeks employment in pursuits which consume their property, or, at least, divert their thoughts from the means of preserving it. The rapacious trader who amasses wealth may have as large a head as the philosopher who wastes his substance in schemes of ideal good; but the size will be developed in a different direction. The one

acquires riches; the other, perhaps, loses money and gains renown; but both distinguish themselves from the mass, and both, we may take for granted, have larger heads than those easy men who remain contentedly at the bottom of the social scale. The principle, in short, if sound, supplies us with a key to the revolution of fortunes in families. We see an individual rise in the world, and we call it chance or good luck; but it is merely a powerful brain mounting to its proper station. The descendants of this person intermarry with families of the same class, and thus a race of large brains is continued in the upper ranks, or they cross in a wrong direction, and, after riding in their carriages, perhaps change places with those who drove them. Were society founded on just principles, the *aristocracy of the brain* would predominate over every other; but many causes keep those down who are down; and a hundred devices have been contrived by rich men to prevent their heirs with small heads from sinking to the level for which nature designed them. Hence we may have many small brains in the upper ranks, and many large ones in the lower, though, on the great scale, there is apparently a correspondence between the size of the head and the individual station in life.

THE LATE M. DUPUYTREN.

THE funeral *cortège* of this distinguished professor was composed of members of the Faculty of Medicine in scarlet robes, of a deputation from the Academy of Medicine and the Institute, amongst whom were M.M. Poisson, Arrago, Thenard, Larrey, and Pariset; of a number of peers and deputies, artists, physicians, and of all the pupils of the school where the deceased lectured. It set out from the abode of the eminent dead, in the Place St. Germain l'Auxerrois. The place of interment was the romantic Pèze la Chaise, into which the great master's pupils drew the body.

Around the place of interment, the crowd, which was immense, formed a circle, and, in the midst of the most profound silence, M. Orfila, of the Faculty of Medicine, pronounced the following discourse:—

“Death has just struck a fatal blow, in taking from science, his family, and friends, Dupuytren, while still in the vigour and strength of life. The loss of one of the most illustrious surgeons of Europe will sound in tones of lamentation throughout the whole world. Those learned societies which were honoured by counting our colleague of their number, that great hospital where his genius shone with such *eclat*, and, if possible, still more the Faculty of Medicine of Paris, of which he was so distinguished an ornament, have now but to express their grief, and to mingle their regret over a tomb in which are

about to be deposited the remains of one so celebrated. Eloquent peers will undertake the task some day of proclaiming the scientific titles of Dupuytren, whose life, too short alas! was wholly consecrated to the teaching, practice, and perfecting of that art whose boundaries he extended.

"You will hear without surprise our academicians boast of the depth of observation, the enlightened knowledge, and elegance of style, which gave our late colleague so high a rank in the discussion of the most difficult questions. The physicians and surgeons of France will be unanimous in the sentiments of admiration he inspired, both by his numerous discoveries, and by the impulse which many branches of science received from his talent.

"Speaking as the organ of the Faculty of Medicine of Paris, I should, perhaps, chiefly point out all the services which he conferred upon it, by drawing a faithful picture of his services as a professor; but how could I undertake such a task, thus suddenly called upon to speak of one whose career was so brilliant, and while my mind, full of the melancholy event which has brought us together, has scarcely time to depict the leading features of his career.

"Dupuytren, Professor of the Faculty of Medicine of Paris, Member of the Institute, of the Royal Academy of Medicine, and many other learned societies, native and foreign, formerly Inspector of the University, Officer of the Legion of Honour, Knight of the Order of St. Michael and St. Wladimir, &c., was born at Pierre Buffiere, in the department of La Haute Vienne, the 5th of October, 1777. Devoting himself early in life to the study of medicine, he soon rendered himself remarkable in the eyes of his instructors by his continual application, and his happy disposition, and he speedily commenced the study of pathological anatomy and surgery.

"Gifted with a high faculty of eloquence and profound knowledge, he had from the commencement a numerous school to his private lectures, and took rank amongst them, destined to render the rank of a professor distinguished. He was appointed Professor in 1795, on the reorganisation of the school, and before he had attained his eighteenth year. In 1801 he obtained the place of chief in the anatomical department; in 1802, that of Assistant-Surgeon at the Hôtel Dieu; he was called in 1812 to fill the chair of operative medicine, vacant at the Faculty by the death of the celebrated Sabatier; finally, he became Professor of Clinical Surgery in 1815, and Chief Surgeon of the Hôtel Dieu in 1818.

"The greater part of these appointments were obtained after brilliant and painful *concours*, in which Dupuytren had to contend against men of transcendent merit, thus placed at the head of French medicine and

surgery. And never had the plan of election by *concours* a more eloquent advocate than our colleague. We all remember that in 1821, speaking in the name of the Faculty, in a solemn sitting he demanded, in a remarkable discourse, the re-establishment of this system, which had been suppressed for some years.

"The activity of Dupuytren as Surgeon of the Hôtel Dieu and Professor at the Faculty, has never been impugned. The General Council will long remember the services he rendered to the poor in the first hospital of Paris, and if it has constantly appreciated in the highest degree the devotion of Dupuytren to the sick entrusted to his care, and the attention which he lavished upon them, it can with difficulty console itself now for the loss which, in common with us, it cannot fail to deplore. On the other hand, the Faculty of Medicine has never seen the duties of the Professorship filled more assiduously. Always, both in his lessons and acts, his judgment was developed in the advice which he gave, and in its immediate application to the healing art. Above all, in his lectures on clinical surgery, of which he had the management for eighteen years, he acquired a reputation which can with difficulty, if at all, be surpassed.

"Frequently obliged to discourse upon diseases which he had hardly had time to examine, he always astonished his hearers by his accuracy of diagnostic; and, when he was compelled from necessity to recur to the last resource of surgery, who better than he knew how to conform to the maxim of Celsus with the view of diminishing suffering, avoiding accidents, and ensuring the success of the operation? If it were necessary now to recite all the medico-chirurgical questions discussed and elucidated by Dupuytren in his lectures, I should have but to trace out a table of the matters of which science is composed. I would above all recal to your recollection the instruments and operating processes which he either invented or brought to perfection. Can any one forget the lectures, original and rich in facts, on the arterial compressor, on venous hæmorrhage, on consecutive hæmorrhage in wounds, on the pathological anatomy of the fistulous passages, on lachrymal fistula, on the diagnostic of certain compound tumours of the scrotum, on complicated hydrocele of fibrous and cartilaginous degeneration, on nasal polypus, on strangulated hernia, on the displacement of the mucous membrane of the rectum, on the artificial anus, on the operation for cataract, lithotomy, excision of the elbow-joint, and a new proceeding by which the ulnar nerve is preserved, on resections in ununited fractures or those which were badly united, on fractures of the fibula and the apparatus invented for their treatment, on the congenital luxation of the femur, on wounds of arteries complicating fractures, on retraction of the fingers, on the spleen, on the lingual

nerves, on the motions of the brain, on the influence of the eighth pair of nerves in respiration, &c.

"It was not enough for Dupuytren to have given during his life proofs of his unalterable attachment to the Faculty and its pupils; he wished to be remembered by a last testimony of the interest he felt for it; and his last legacy will, while perpetuating his beneficence, make the memory of the benefactor imperishable. The generous disposition will be remembered with gratitude, which has given to one body of instruction a chair of pathological anatomy.

"It belonged to a distinguished and learned individual, who, by his researches, has so largely contributed to naturalise and propagate this science in France, to write a systematic course of instruction so long sought for by all lovers of science; known to the citizen who made so worthy, so noble a use of a fortune, which he owed to himself alone.

"Yes, dear colleague, your wish shall soon be fulfilled; your name shall be a thousand times proclaimed, a thousand times blessed from that chair, around which your powerful voice attracted the numerous auditory, which to-day, silent and in mourning, surround your bier. Future generations, like us, full of boundless gratitude, will lament your premature loss.—Adieu!"

After this discourse M. Larrey addressed the crowd in the name of the Academy of Sciences, and M. Parrisot, in that of the Academy of Medicine. M. Bouillaud also paid the tribute of his eulogy to the illustrious dead, and M. Royer Collard, in the name of the former pupils of the Hôtel Dieu, spoke in the same tone and spirit.

The last who addressed the auditory was M. Tessier, a pupil at the Hôtel Dieu, as follows:—

"Drawn together by grief and gratitude, let us give a tear to him who was our glorious master. In his ardour to instruct he sacrificed his life for the advantage of his pupils; and we who, from the last link of this long chain, have beheld him exhaust all the resources of wearied nature, and thus vanquished by suffering and disease leave with regret the scene of his labours. Another would have sought repose and health beneath the fine heaven of Italy; there he derived only new lights, which he hastened to communicate to us.

"Yet the sacrifice of his whole life was not enough; he wished to strengthen the ties which bound us to him; he has portioned science as he would an inheritance to his children.

"May his cherished and venerated memory be transmitted to generations to revere; may our gratitude be as enduring as our regret! Let him but live in our hearts, and our hearts cannot fail to find their noblest inspirations in the recollection of a life such as his."

M. Dupuytren lies buried not far from General Foy, a little to the left, between some tombs as yet without any inscription.

British Hospital Report.

ST. GEORGE'S HOSPITAL.

CASE I.—*Incarcerated Omental Hernia—no operation.*—But while strangulated hernia cannot be operated on too soon, there are frequently occasions for the exercise of judgment on the part of the surgeon in determining whether strangulation is actually present or not. An old and large intestinal hernia, for instance, frequently causes attacks of severe pain, constipation, tenderness of the tumour, sickness and vomiting, and yet no operation may be necessary in such case, the bowel being merely incarcerated, i. e. its functions impaired by its confinement, (generally from some imprudence in diet,) and yet the stricture not being tight enough to endanger the circulation in the protruded viscera; in which case the symptoms may be combated by appropriate means, and the temporary obstruction overcome. It is in cases of this description too that the operation becomes really dangerous, from the size of the tumour, and from the adhesion generally formed, and hence the propriety of that line of practice recently again recommended by Mr. Key, though so often lost sight of, viz. when strangulation actually takes place, to divide the stricture without opening the sac. With omental hernia again, although an operation is sometimes as urgently required as for intestinal hernia, yet there is no doubt, that, as a general rule, more room is afforded for the trial of such means as may succeed in removing the effects of the stricture without an operation. There is danger, indeed, of a portion of bowel being concealed in a mass of omentum, so that if from the symptoms there appears reason to fear such an occurrence, the surgeon should not trust to the feeling only of the tumour, but rather operate unnecessarily than incur the risk arising from delay; if, on the other hand, the symptoms are mild, he may wait till more urgent necessity for operation arises, and so, perhaps, avoid it altogether.

Ann Tenison was admitted under the care of Mr. Hawkins, Nov. 15th, 1833, with femoral hernia. She had rupture for six months, and the present tumour has continued down for the last fortnight, producing no pain or inconvenience till four days ago, when symptoms like the present came on, and after a few hours' suffering again left her; they returned, however, a second time, last night. The tumour is not very large, it is moveable and circumscribed, somewhat elastic, and has a large gland over it; it receives a slight impulse on coughing; it is very tender, and painful even when not handled,—she has also a good deal of pain in the back and around the umbilicus.

The bowels have been open since the tumour has been down, and she has no sickness; tongue white; pulse not very quick.

On her first admission she was placed in a warm bath, and had 20 ozs. of blood taken from the arm, and an unsuccessful attempt was made to reduce the tumour. Mr. Hawkins saw her in the middle of the day, and thought that the tumour was omental only—that the stricture was not very tight, from a slight impulse being still perceptible on coughing—that it was incarcerated, and not strangulated, and consequently that an operation would probably not be necessary; in which opinion the other surgeons who were in the hospital concurred.

A dozen leeches were applied over the tumour, an injection administered, and some aperient medicines given by the mouth. By this treatment the pain was reduced, and the bowels acted upon several times; she slept well during the night, and had no return of symptoms, and in a few days she was ordered to wear a truss upon the tumour, with a not very forcible spring, and the pad not so convex as usual.

CASE II.—Wearing a Truss upon an Irreducible Hernia.—In speaking of the propriety of wearing a truss over the omentum in the case just related, Mr. Hawkins said, that if care was taken not to use too great pressure, nor at first to continue it for too long a time at once, there was no danger of producing inflammation or other mischief in the part, and that the truss served effectually to prevent further protrusion, even if it did not succeed in reducing the hernia altogether. He then related the following case, to show that the same treatment was also applicable to intestinal hernia, and, being an interesting one, we preserved notes of the account.

A young gentleman, about thirteen years of age, was under the care of a physician for some time, in consequence of great disturbance of the bowels, and consequent derangement of the whole system, the cause of which was not evident till the boy complained of pain on one side of the abdomen, when it was clear that the testes had not yet reached the scrotum, and the pain was found to be just above the ring on one side. I was then asked to see him, and ascertained that without having come through the external ring, there was an effort to protrude on the least coughing or other exertion, the bowel apparently filling the inguinal canal on both sides. I then directed a double truss to be worn not pressing upon the external ring, where the testicle would have been compressed, but having a broad pad bearing upon the course of the inguinal canal. The boy immediately improved in health, and after wearing the truss for about a year, the testes had reached the scrotum, and the incipient double inguinal hernia was completely cured. Something of the same kind as this Mr. Hawkins

said was very common about the time of puberty, but the same boy was about a year afterwards an example of a circumstance which is comparatively very rare. He was observed to have very great irregularity in the action of the bowels, which were sometimes obstinately constipated for several days together, resisting the strongest purgatives, and only yielding at last to repeated doses of castor oil; the attack of constipation being frequently succeeded by diarrhoea for some time, during which the evacuations frequently showed a good deal of blood. Being under the care of the same physician, he frequently examined the abdomen, and I also saw him with the same object, but it was evident that there was nothing now wrong in the inguinal canals, and no complaint was made which led us to suppose that any other hernia existed to account for the severe symptoms he occasionally laboured under, and which had a good deal affected his health. At last, however, he fortunately received an accidental kick in the groin from a child, which drew attention to this part, and then a very small body was felt quite deep under Poupart's ligament, which was soft and slightly tender, and in which it seemed that our patient had occasionally heard something like the noise of air. This immediately excited our attention, as perhaps a femoral hernia, although, if so, it must be a very small portion of one side only of the bowel, not including the whole calibre of the canal, and scarcely equalling a common gland in size, and therefore, as it seemed, scarcely sufficient to account for the symptoms he had laboured under for several weeks, as no pain whatever had been felt in this part. Mr. Brodie also saw him with me, and said that he had never seen anything of the kind before. We agreed, however, that he should wear a slight truss over the part for some time. The effect of this was quite surprising, for the action of the bowels directly became regular and the health better. In a short time nothing could be felt in the part, and he soon after left off the truss without having since had any return of similar symptoms.

CASE III.—Operation followed by great Debility and Irritation.—Susan Dixon, æt. 44, admitted Oct. 22nd, 1833, under the care of Mr. Hawkins, with a femoral hernia of some size, turning upwards over Poupart's ligament. She states that she has suffered from a rupture for thirteen years, during which time she has never worn a truss; she has never been without a swelling in the groin, which has increased after any exertion, and she has suffered from frequent "bilious attacks." A year ago the rupture was strangulated, though without such severe symptoms as at present, and at that time the tumour was larger than it now is. She was seized with the present attack while scouring the floor on Saturday morning the 19th (three days and a half ago), since which time pain in the

bowels, vomiting, and excessive languor have continued almost without intermission till her reception in the hospital. During this time she was treated for inflammation of the bowels, with forty leeches, purgative medicines, and a large blister!—the hernia not having been discovered till this morning. On her admission she complained of great tenderness on the tumour and in the abdomen, especially in the part immediately around the tumour; there is very distressing and constant vomiting of dark brown substance, partly fecal in smell; the countenance sunk and sallow, and with an expression of great weakness and anxiety. Bowels not opened since Friday the 18th; tongue white and furred; pulse quick and weak.

The patient was kept in a warm-bath for a considerable time, but without a reduction being effected; Mr. Hawkins therefore proceeded to an operation. The steps of the operation were remarkable for the quantity of fluid contained in the fascia propria, and its exact resemblance to a hernial sac, especially as the real sac was so exceedingly thin and transparent, that when the fascia was opened and the fluid let out, it looked like the immediate peritoneal investment of the bowel. So distinctly was this part seen through the sac that many spectators thought the operator was cutting into the bowel, especially as it was some little time before Mr. Hawkins could satisfy himself of the exact nature of the parts, a great number of serous bands at the reflexion of the fascia propria adding still farther to the obscurity, as they looked exactly like adhesions between the bowel and the hernial sac, for there was no distinction in appearance between the outer surface of the real sac, and the inner surface of the fascia propria, both being as smooth as any serous membrane. When the real sac was finally opened, three or four inches of bowel were seen, which was very dark, softened, and echymosed, especially where the two folds of intestine were embraced by the stricture; the bowel being pulled down after the division of the stricture to examine its appearance, which showed very strikingly the changes produced by the stricture on the part below.

23rd. The operation being performed in the evening, she was left quiet during the night, and in the morning an injection was administered, which brought away a good deal of feces. The sickness was instantly removed by the operation, and had not returned. Pulse fuller, but weak and slow, and intermitting every 20th beat. Some beef-tea allowed.

R. Calomel., gr. iij. statim. Mag. sulph. ℥ij.
Aq. menth. pip. ℥iiss. M. 4tis horis sum.

24th. Streaks of blood in the evacuations procured by the medicine, which Mr. Hawkins

said he had several times seen where the bowel was much injured by strangulation, and he recollected one case in which more than a pint at time had thus come away, the patient, however, ultimately getting well. The pulse is more slow, and intermits much more frequently; the water requires occasionally to be drawn off by the catheter; abdomen tender and full, as if from flatulence.

To take a little white wine, and some brandy occasionally in water, and with arrow-root.

R. Sp. æther. nitros, ʒj. Mist. camp. ʒx.
M. 6tis horis.

Vespere. Feels stronger and better, but complains much of flatulence, amounting almost to tympanitis. P. intermits less frequently.

Ordered a large poultice of chamomile flowers in hot water, which gave great relief to the abdomen.

25th. Bowels open, a little blood still coming away; tympanitis continues, by which the abdomen is rendered of great size; pain and tenderness however less; P. stronger and fuller, and not at all intermittent; tongue clean; countenance less anxious. Mr. Hawkins ordered her to lie upon her side, which assisted in some measure in expelling the wind. Some relief was also given by the introduction of a large catheter into the rectum, through which some wind came away, which the sphincter otherwise retained. Most relief, however, was subsequently given by binding a broad flannel bandage pretty tightly round the abdomen. The wound dressed and looking healthy, though suppurating in part.

R. Haust. salin. ammoniat. ℥iiss.—
Trac. opii, ℥j. v. M. 6tis horis.

27th. Better; bowels open; pulse stronger; tongue clean.

28th. Sickness last night, otherwise much the same; tympanitis a little less; bowels not open, and some solid feces felt in the colon.

R. Ol. ricini, ℥j.
Rep. pil calomel, hss.

30th. Still a good deal of pain in the abdomen occasionally, to which a mustard poultice is frequently applied with advantage for a few minutes at a time. Wound open again, partly in consequence of suppuration.

Nov. 5th. She has gradually improved, and feels nearly as well as before the strangulation, being still, however, very weak and languid.

She has continued her wine and brandy, and as much food as she can take.

R. Infus. cascar. ℥iiss. Acid sulph. dil.
℥vi. Tr. gent. c. ʒss. M. ter die.

A sinus afterwards formed to some distance from the wound, which required to be laid open, but on the 28th she went out cured.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, Feb. 12, 1835:—John Gay, Wellington, Somerset; James Edward Beveridge, London; Henry Pilleau, —; James Thomas Blackmore, London; John Lewis Barillier, Leigh, Lancashire; Aris Henry Nourse, Birmingham.

MISCELLANY OF FACTS.

F. Society of Pharmacy at Paris.—M. Raymond has been elected President; M. Bussy, Vice-President; and M. Cap, Secretary, for the year 1835.

London Medical Society.—The Fothergillian medal for the year 1834 was awarded to Mr. Moon; the medal of the Society to Dr. Shearman. The anniversary oration will be delivered by Mr. Dendy, on the 9th of March.

Royal Institution.—The subject for the lecture on Friday, February 20, is the Respiratory System in the Animal Kingdom, by Dr. Graves.

How to mend a broken Basin.—Sir A. Carlisle is known to the frequenters of the Westminster Hospital as one of the most eccentric men in existence. While going round the wards he occasionally utters some good things; not a few of his remarks are, however, very trite and commonplace. In Percy Ward of the old hospital there was some time ago a man lying with a fracture of the pelvis. He had been in the house about three months, and was nearly well. Sir A. C., while walking through the ward, stopped near the bed, and asked the dresser what was the matter with him. A fractured pelvis was the reply. What business has he here, then? You should send him to the *china-merchant*, he is the proper person to mend a broken basin. No occasion, Sir Anthony, it is already rivetted.

William Lynn, Esq., Consulting-Surgeon to the Westminster Hospital, has resigned his seat at the Court of Examiners of the Royal College of Surgeons. This venerable surgeon, now in his eightieth year, has recently experienced several attacks of an apoplectic character, which have incapacitated him for active service. He will be succeeded by Sir B. C. Brodie, although the junior member of the Council. He takes the seat because the bye-laws make the Sergeant-Surgeon to the King eligible in preference to all others.

APPOINTMENTS.

Naval.—Mr. Price, surgeon to the Royal Sovereign yacht, and to relieve Dr. Donely, surgeon R.N., in the charge of the medical marine depot at Pembroke.

Military.—Assistant-Surgeon Foss, of the 44th Foot, has exchanged with Assistant-Surgeon John Dempster, M.D., of the 38th Foot. Assistant-Surgeon Thomas Coke Gaultier, M.D., of the 55th Foot, has also exchanged with Assistant-Surgeon John Hartley Sinclair, M.D., of the 48th Foot.

Resignations.—Mr. Wm. Fitch, surgeon of the Kent and Canterbury Hospital. Mr. Miller, apothecary to the Bloomsbury Dispensary, Great Russell-street. Mr. —, examining surgeon and apothecary to the Marine Society's ship off Deptford. Dr. Holroyd, physician to the Marylebone Dispensary, Welbeck street, Cavendish-square.

DEATHS.

Dr. James Bryce, assistant-surgeon to the E. I. Company's service at Kyouk Phoo. Mr. David Stewart, surgeon of Kirriemulr, Scotland. Dr. Robt. Tindale, at Ocotol, near the Real del Monte, Mexico. Dr. John Barry, of Henrietta-street, Cork. Mr. Edward S. Bonthoon, of Rankeillor-street, Edinburgh, surgeon. Assistant-Surgeon Charles Rankin, of his Majesty's ship Racer, stationed in Jamaica.

WEEKLY BILL OF MORTALITY.

London, Tuesday, February 17th, 1835.

Abscess	13	Indigestion	2
Age and Debility	76	Inflammation	63
Apoplexy	15	Inflammation of the	
Asthma	32	Bowels & Stomach	2
Cancer	1	Inflammation of the	
Childbirth	9	Brain	7
Consumption	88	Inflammation of the	
Convulsions	54	Lungs and Pleura	9
Croup	3	Insanity	8
Dentition, or Teeth-		Liver, Diseased	5
ing	10	Measles	33
Diabetes	1	Mortification	10
Dropsy	17	Paralysis	4
Dropsy on the Brain	16	Rheumatism	3
Dropsy on the Chest	3	Small Pox	17
Epilepsy	1	Sore Throat & Quinsey	2
Fever	16	Spasms	2
Fever, Scarlet	7	Thrush	1
Fever, Typhus	2	Tumour	1
Gout	1	Veneral	1
Heart, Diseased	5	Unknown Causes	11
Hernia	2		
Hooping-Cough	20	Stillborn	22

Buried, Males 324. Females 279 Total 603
Increase in Burials reported this week, 171.

LITERARY INTELLIGENCE.

The "*Clinique Medicale*" of Dr. Andral, Professor to the Faculty of Medicine of Paris, &c., condensed and translated into English, with practical remarks, principally regarding the treatment of disease, extracted from the writings of the most distinguished medical authors. By Dr. SPILLAN, M.D., Fellow of the King and Queen's College of Physicians in Ireland.

Every thing of real practical value in the original French has been scrupulously preserved in the present English edition, those cases only having been omitted which were not calculated to excite the interest or reward the attention of the British reader. The great advantage of thus possessing, in the condensed form of *one volume*, a *Complete System of Medical Pathology*, which in the original occupies five volumes, is sufficiently obvious. The work will be published in *four parts*. The first part will appear in the middle of April, and the remaining parts at intervals of two months each.

Preparing for publication, by subscription, in folio, *Fractures of the Extremities*, exhibited in twenty plates, showing the Causes of Displacement, with an explanation of the Appearances and mode of Treatment. By GEO. HIND, M.R.C.S.L., formerly House-Surgeon to the Middlesex Hospital, and late Curator of the Museum of Anatomy of the University of London.

CORRESPONDENTS.

Singultus.—The facts he complains of are in a fair way of being remedied; a little patience will do a great deal.

Inquirer.—Dr. Waller and Dr. Blundell are the two chief supporters of transfusion.

X. P.—A letter has been forwarded to his address.

A General Practitioner.—There are two tinctures of the lobelia inflata, one spirituous the other aetherial; the latter only possesses the virtues of the plant, the former is useless.

Errata in our last.—Page 88, for "Russian," read "Prussian."

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

LECTURES

INTRODUCTORY TO THE COURSE OF THE
INSTITUTES OF MEDICINE,

DELIVERED BY

ROBERT J. GRAVES, M.D.,

King's Professor, Dublin.

LECTURE XVII.

GENTLEMEN,—At the conclusion of my observations on the appetite for food, I spoke of the various modes adopted by mankind to allay the sensation of hunger, and of the extraordinary effects produced on the system by long deprivation of food and drink. In considering the length of time man may subsist without taking any solid aliment, it is remarkable that persons labouring under various forms of disease bear the want of food much longer than those in the full enjoyment of health. Thus we see every day instances of persons in fever taking no nourishment for weeks except a little whey or barley water. The same thing is observed in certain forms of gastric disease, the patient goes on sometimes for months harassed by continued vomiting and rejecting his food almost immediately after it has been swallowed, yet it is very rare to find such a person dying of starvation.

A knowledge of the symptoms which arise from want of food is of considerable importance in the treatment of fever and other affections, in which the patient remains for a considerable time without taking any kind of nutritious aliment. There is a certain advanced stage of fever, when a degree of delirium is present, when the patient's pulse is quick, his eye suffused, his tongue dry, his sensibility to external objects either impaired or deranged, his watchfulness persistent, or only interrupted by an imperfect slumbering with half-closed eyelids, when every organ is in a morbid condition, and every function vitiated or suppressed. At this period of an almost mortal struggle with disease, the dry tongue, the blood-shot eye, and the cerebral excitement, are apt to betray the practitioner into the error of supposing that the

existence of inflammation in the brain or stomach is the only thing capable of accounting for the alarming train of phenomena present, and with this impression he has recourse to leeching, blistering, and other modes of depletion. But the mischief is not to be obviated in this way; the symptoms assume a more intense and threatening character, and the patient sinks. A far more reasonable and more successful practice is to endeavour to calm the nervous irritation by the employment of opiates, and to sustain the sinking powers of life by the judicious administration of light nutritious food and wine. Often have I under such circumstance seen the tongue become moist and clean, the conjunctivæ grow clear and pale, the delirium subside, and tranquil refreshing sleep return, under the use of wine.

I have mentioned that one of the effects of starvation was inflammation of the stomach and duodenum. In many cases of fever, where gastric or gastro-enteric disease is said to exist, and in numerous instances of dyspepsia supposed to be connected with an inflammatory condition of the mucous membrane of the stomach, the treatment adopted by many practitioners on the continent and by some in this country, is perpetual leeching and a rigorous diet; in fact, besides constant local depletion, a modified system of starvation is enforced. Now the gastro-duodenitis of fever is, in a vast number of cases, nothing more than a species of indigestion, with pain in the stomach and tenderness on pressure, and, in such cases, the debilitating effects of constant leeching, combined with the want of food, have brought on the very symptoms which they were intended to remedy. In concluding this brief notice of a very important subject, I would beg leave to refer you to Piorry's work, in which you will find some excellent remarks on the *diète absolue*.

With respect to the nature of their peculiar aliment, animals have been divided into frugivorous, graminivorous, carnivorous, and omnivorous. Among the latter man is properly classed. Man and several other animals have been called omnivorous, because vegetable matters, fruits, and flesh are equally suited for their nutrition.

A great deal has been said and written about the diet most suitable for man. Formerly it was the fashion to extol the numerous advantages attendant on a frugal fare; it was asserted that the more simple the diet, the more healthy; that vegetable food was more conducive to longevity than animal, and that repasts consisting only of the fruits of the earth and the water of the spring were essential to a vigour of body, clearness of intellect, and peace of mind. Modern investigations have overturned this beautiful and poetic system of dietetics, by proving that it has no real foundation in nature. In the first place it appears, when we study the conformation of the human body, and the peculiar structure of the organs employed in the various processes of digestion, we find that man is evidently destined to be an omnivorous animal. If we look to his teeth, we find them to be adapted to the mastication of all sorts of food, whether fruits, vegetables, or flesh. Again, when we examine his stomach and intestines, we find that he has neither the short and simple intestinal tube of the carnivorous, nor the long and complex one of the graminivorous animals, in fact, that the stomach and intestines are calculated to derive nutrition from every species of food. In addition to this, man is the only animal that prepares his food, submitting the various articles of diet to processes which at once render them agreeable to the palate, and easily digested; in other words, man, prompted by instinct, and assisted by reason, is the only cooking animal, the only one capable of modifying the properties of the various alimentary matters used by different classes of animals, so as to render them suitable to his own nutrition. Hence the various operations of cookery are universally known, and have been practised from the most remote era, and there is no instance of a tribe or nation existing at any period and unacquainted with the modes of preparing food. It is true that until the arrival of Europeans, the inhabitants of New Holland were ignorant of the process of boiling water; but they were perfectly well acquainted with the modes of preparing food by roasting or broiling.

The opinion of the poets and philosophers, that a simple vegetable diet was calculated to produce, not only greater clearness of intellect and length of life, but also greater bodily vigour, does not seem to be founded in truth, for it has been established, that persons living on a mixed diet and using a large proportion of animal food, enjoy equal, if not superior, longevity, and exhibit much more intellectual energy and bodily strength. That persons living on a mixed diet, and using a large proportion of animal food, are stronger than those who subsist chiefly on vegetables, is proved by the experiments made with the dynamometer by M. Peron. He selected seventeen Frenchmen, fourteen Englishmen, fifty-six men of the island of Timor, seventeen New Hollanders, and twelve of Van Diemen's Land (the three latter living chiefly on vegetables), and, having

ascertained their respective strength, he gives the mean results in each case. From the details it appears, that in point of strength the English rank first, next the French, then the inhabitants of Timor, and, lastly, the men of New Holland and Van Diemen's Land. In the two latter, the greatest strength of the arms was equal to 62 kilogrammes; in the English trials the greatest was 83, and the smallest 63. In the power of the loins, the highest among the New Hollanders was 13 myriagrammes; the lowest of the English was 12.7, and the highest 16.3. Thus we see the English, who consume a considerable proportion of animal food, are stronger than the French, and the French than oriental nations, who subsist chiefly on rice.

The idea of living on a purely vegetable diet originated in many countries from a notion that it was wrong and unlawful to deprive animals of life, for the purpose of supplying bodily wants which could be otherwise gratified, and it is the peculiar boast of those who profess this doctrine, that it is in strict accordance with the dictates of a refined and comprehensive humanity. But the discovery of the microscope has unfortunately stripped this doctrine of its most amiable character, by showing that, in chewing his crumb of cheese, the Pythagorean murders thousands of living beings, and in swallowing his cup of water deprives myriads of life.

You may ask why do I dwell on this subject? Because I am persuaded that many of the opinions held at present with respect to diet, are founded on false theories. I am persuaded that simplicity of diet is too much insisted on in the treatment of dyspeptic and other cases. I believe that simplicity in prescription, and simplicity in diet, have been carried too far. It is now well established by theory as well as by experience, that in prescribing we accomplish our object with more certainty and effect by combining several remedies, than by limiting our practice to the employment of a single therapeutic agent. It is the same thing with respect to diet. I am not an advocate for luxurious living, nor would I recommend that excess of variety which characterises the meals of the gourmand, but I think it is wrong and injudicious to make persons live on a single dish. There is a physical as well as a moral objection to it. The custom of partaking of various kinds of food is not easily overcome, the patient grows tired of his solitary chop or beef-steak, and feels no gratification in eating. Now, *cateris paribus*, whatever is eaten with a relish is more easily digested than that which is swallowed with indifference or dislike. Many persons assert that a meagre and scanty diet, in quantity much smaller than the appetite demands, and consisting merely of a little bread and gruel, is calculated to promote longevity, and maintain intellectual as well as bodily vigour. Gentlemen, I do not believe this. I have no intention of encouraging gastronomic ingenuity, but

I must confess I look on such simplicity in diet as an error against nature. It is an error against that principle which has made man press into his service so many individuals of the animal kingdom, and convert so many vegetable substances to the purposes of his own nutrition.

Let us consider for a moment those articles which are prepared by the hand of nature for the food of man and other animals. Let us look to that substance which forms the only nutriment of the young of all the mammalia, milk. Is milk a simple substance? No; it is a compound of saccharine, caseous, oily, and albuminous principles; a substance which the simplifiers of diet would say was too complex to be presented to the stomach, and yet it is that which nature has destined for the only support of a vast number of animals at the tenderest period of existence. Again, let us look to the food prepared for graminivorous animals, and we shall find that nature has been here equally varied and equally bountiful in her productions. It would be impossible to get a pasture in which the grass is restricted to a single species; in most pastures there are from fifteen to twenty different kinds, differing in the nature and combination of their vegetable principles, and having separate effects on the economy. Had nature limited the horse or the ox to a single species of grass, this profusion would not have existed; but it was never intended that man and his fellow animals should adhere to a strict simplicity of diet. On the contrary, I feel fully convinced that a certain variety in food is highly essential to the restoration or maintenance of health. This opinion may appear strange, but I can aver from extensive experience, that the physician who treats the valetudinary and dyspeptic on these principles, will be much more successful than he who restricts his patient to a single dish.

The researches of experimental physiology have elicited a number of important facts bearing on the question of simplicity in diet. M. Magendie, as you all know, has shown that dogs fed on sugar alone become after a certain time weak and emaciated, lose their sight from ulceration of the cornea, and eventually die. Again, M. Raspail, in his late work, *Nouveau Système de Chimie Organique*, has shown that gluten, the nutritive principle in plants, will not sustain animal life. Neither sugar nor gluten is alone capable of supporting life, but, if you combine them, they afford a wholesome and nutritious aliment. The human body is not simple; it consists of a great number of fluids and solids, which differ essentially in their nature and chemical composition. Into this composition a great number of elementary principles enter, and is it not, then, reasonable to suppose that a variety of materials will be required? If we were to reduce diet to such a state of simplicity as to diminish the number of the elementary principles which enter into the composition of the solids, I do not think

the nutrition of the body could go on. It is true, that nature is able to manufacture a great many different elements from very few materials, but a certain number of principles must exist to enable her to prepare the compound which she employs for supplying the various wants of the system*.

"In France, most substances are exposed, through the medium of oil and butter, to a temperature of at least 600° Fah., by the operation of frying or some analogous process. They are then introduced into a macerating vessel with a little water, and kept for several hours at a temperature far below the boiling point (212°), not perhaps higher than 180°; and by these united processes, properly conducted, the most refractory articles, whether of animal or vegetable origin, are reduced, more or less, to the state of pulp, and admirably adapted for the further action of the stomach. In the common cookery of this country, on the contrary, articles are usually put at once into a large quantity of water, and submitted, without care or attention, to the boiling temperature. The consequence is, that most animal substances, when taken out, are harder and more indigestible than in the natural state, for it is well known that albuminous substances (as, for example, white of egg) become the harder the longer they are boiled."

An excellent illustration of the principle laid down by the Reviewer is afforded by the liver and the kidneys, each of which becomes remarkably harder in consequence of the common methods of cooking. There can be little doubt that the livers destined for the food of dogs are rendered much less palatable and digestible by the pains the unwilling cook is forced to bestow on them.

"These observations are often of the utmost importance in a medical point of view. When the powers of the stomach are weak, a hard and crude English diet (such, for example, as half raw beef-steaks so frequently recommended) is sure to promote much discomfort by promoting acidity, while the very same articles, well cooked upon French principles, or rather the principles of common sense, can be taken with impunity, and easily assimilated.

"It has been remarked, on the authority of one of our ablest physicians, that our principal alimentary matters may be reduced to three classes, of which sugar, butter, and the white of egg, are the representatives. *Now, it is a curious circumstance, that milk, the only article absolutely prepared and intended by nature as an aliment, is a compound of all the three classes; and almost all the graminaceous and herbaceous matters employed as*

* The preceding observations on diet were given in a lecture delivered last November. Those which follow are taken from the 104th No. of the Quarterly Review, which I did not see until long after; they remarkably corroborate my views.

food by the lower animals contain at least two, if not all the three. The same is true of animal aliments, which consists at least of albumen and oil. In short, it is almost impossible to name a substance, employed by the higher animals as food, that does not essentially constitute a natural compound of at least two, if not all three, of these great principles of alimentary matter." * * * *

"It would seem that various food is the most wholesome for man; that he thrives best upon a proper admixture of vegetable and animal diet. The Brahmins, who feed solely upon rice, are not long-lived, and are endowed with feeble constitutions; on the other hand, the Esquimaux are obliged to mix saw-dust with their train-oil." * * *

"But it is in the artificial food of man that we see this great principle of mixture most strongly exemplified. Dissatisfied with the productions spontaneously furnished by nature, he culls from every source, and forms in every possible manner, and under every disguise, the same great alimentary compound. This, after all his baking, roasting, and stewing, &c. how much soever he may be disinclined to believe it, is the sole end and object of his exertions. Even in the utmost refinement of his luxury the same great principle is attended to; and his sugar and flour, his eggs and butter, in all their various forms and combinations, are nothing more or less than disguised imitations of the simple elementary prototype—milk *."

To conclude this part of our subject, I may observe, gentlemen, that even water, as nature offers it for our use, is by no means unadulterated and free from what the ignorant would call impurities; as, whether we draw from the spring or the river, it contains a great variety of salts, gases, &c.: when perfectly purified by distillation, it becomes at once unpalatable and indigestible!

So far as to the general principles of diet. A few facts may be here mentioned with respect to some particular articles of food. It is a curious fact, that occasionally certain principles become developed in chocolate and cocoa when long kept, which render them injurious to the sight. Persons who have used these substances (but particularly cocoa) for a long time, are apt, under such circumstances, to get weak sight and amaurosis. Chicory also brings on amaurosis, and this substance is not unfrequently used to adulterate coffee. Rice also appears to be bad for the sight, particularly when used in a damaged state; and it has frequently been remarked, that the number of blind persons in the East is very great. Dr. Tytler has gone so far as to assert that the Oriental cholera depends on spoiled rice; this, however, is not borne out by facts, for we have had it raging here among a population, the majority of which never even tasted rice.

Having spoken of simplicity of diet in re-

spect to food, let me now say a few words concerning drink. I have already stated that it was my conviction that too much simplicity in the use of solids was bad; I have the same objection to make with respect to fluids. I believe that water alone was never destined to be the exclusive beverage of mankind. Nature has prepared milk for his use as well as water; and in tropical climates she has furnished various fluids from plants to refresh his strength and cool his burning thirst. We also find reasoning man, in every country of the globe, manifesting a tendency to express various juices from plants for the purpose of giving variety and zest to his drink. If we turn to the records of the most remote antiquity, we find that in the earliest periods of society, in the days of primitive innocence and patriarchal simplicity, the art of making fermented liquors was known and practised. The use of wine is of very high antiquity among the eastern nations; and we find the early Egyptians using a fermented liquor from grain, which was termed *barley wine*, and was drunk by the poorer classes. Among the infinite ramifications into which the human family is divided, we do not meet with any tribe so barbarous, or so insulated from commerce with the rest of mankind, as to be unacquainted with some mode of giving variety to their ordinary drink. There can be no doubt that nature never intended water to be the only beverage of civilised man; and I am confident that if the whole British nation drank nothing but water for the next twenty or thirty years, they would not be as fine and as vigorous a people as they at present are. Indeed I have but little doubt that if all mankind were to become water-drinkers, they would, in the course of a few generations, realise the poetic idea of the degeneracy of the human race. Of this, however, there appears to be but little apprehension, for the tendency to mix fermented and other liquors with their ordinary drink is universally diffused through the mass of mankind. Here, however, reason must control the appetite; and though it was intended that man should use fermented liquors as well as cooked victuals, still he must recollect, that, like other boons, these must be enjoyed in moderation, and a wholesome medium observed. The abuse of fermented liquors is attended by a numerous train of evils; and hence our Temperance Societies have a highly laudable object in view in endeavouring to control the appetite for drink; but, in pushing matters too far, they have overshot the mark, and thus the arbitrary nature of their rules has prevented their doctrines from being more generally received and adopted. The total interdiction of spirits in every shape has deterred the lower classes from joining their ranks. It is true, that the abuse of spirits is a mighty evil,—that it is the great and destructive poison which operates in the veins of the nation. This, however, should not totally forbid its proper use, for, in small quantity, it appears

well suited to this climate, and to the constitutions of this country, and even possesses advantages over wine.

The constitution of different individuals differs in nothing more remarkably than in the tolerance of spirituous liquors, some being affected by a very small quantity, while others are able to indulge in immense potations with impunity. I lately attended a very fat Englishman, of large stature, who was remarkable as an excellent man of business, and had for many years directed the very complicated affairs of a large factory in the neighbourhood of this city. His intellect was always clear, and he was constantly employed in revising the accounts and superintending the expenditure of an establishment, in which there were five or six hundred operatives. While thus employed he drank a glass of brandy every three quarters of an hour, so that his daily allowance varied from eighteen to twenty glasses! This practice he had continued for many years without any apparent injury to his constitution. The break, however, came at last, and he died of dropsy at the age of 35.

Among savage nations the introduction of ardent spirits by Europeans, has been productive of the most disastrous consequences, and it is to be feared that the supply is facilitated in many cases for the very purpose of producing the moral degradation, and national ruin, that have too often followed their introduction. The most remarkable instance of a savage toper that has been recorded, is mentioned by Moore, in his Account of his Travels in Africa. "The King of Barsally, as well as his attendants, are zealous Mahometans, and whenever he was not completely intoxicated he prayed most fervently. Far from thinking, with others of his persuasion, that it was worse than death to taste brandy, or other strong liquors, he considered it almost a deadly evil to taste any thing weaker. His usual course of life was to rise at night and to drink till towards day-light, then eat and go to sleep till near sun-set. At that time he rose, and, having again drunk copiously, went to sleep till midnight. His insatiable thirst for brandy kept both his subjects and neighbours in a state of perpetual terror: when he stood in need of a supply of this indispensable article, he immediately sent to the managers of the company at James's Fort, requesting that they would dispatch a cargo to be exchanged for slaves, a call which these worthy personages always obeyed with the utmost alacrity. Then the king marched suddenly to a neighbouring town, set fire to three parts of it, and stationed his guards at a fourth, who seized the inhabitants as they attempted to escape. If he was not at war with any of his neighbours, he then (says Moore) falls upon one of his own towns, and uses them in the very same manner."

Tea and coffee have also their peculiar effects on the system. These, however, exhibit a considerable difference in different individuals. One person uses large quantities with

impunity, while another, who takes a moderate share only, leads a wretched life. It is a fact, that many persons, labouring under headach, tremors, bad sleep, and indigestion, may be cured by leaving off tea and coffee, and using instead some table-beer or porter. By substituting these (the latter in the case of English stomachs, the former of Irish), and by giving solid and nutritious food (without confining the patient to one dish), many cases of obstinate dyspepsia have been cured.

With respect to the subject of diet, many curious and important facts may be learned from a perusal of one of the most extraordinary books of modern times, the *Life of Caspar Hauser*. This unfortunate youth, whose birth has been a riddle, and whose death has been a mystery, subsisted until he was upwards of sixteen years of age on bread and water. The extraordinary physiological phenomena connected with this young man's intellect, senses, and bodily functions when exposed to the full influence of physical agents, have been ably and accurately detailed by his biographer, M. Feuerbach. There is one very curious circumstance in his case which deserves notice. He laboured under a constant thirst and drank enormous quantities of water. This habit was not of recent origin, but had existed as long as he could recollect. As soon, however, as he got accustomed to warm drink, his thirst diminished, and in the course of a few weeks the mere addition of heat to his drink had enabled him to satisfy thirst with the ordinary quantity.

Among the articles of food used as mere condiments, or for the purposes of preserving meat, salt is one of the most general. It would appear, that man accustomed himself, at a very remote period of antiquity, to the use of salt, on account of the necessity of preserving the flesh of animals in warm climates, as well as for the purpose of rendering his food more palatable. Many other animals also exhibit a strong liking for this substance, and seek it with extraordinary avidity. In North America buffaloes are known to travel great distances in quest of salt, and pigeons fly hundreds of miles to gratify this desire at the salt springs. In Central Africa this propensity leads to annual migrations of the cattle, which travel in droves for several days, until, arriving at a salt spring, they commence drinking the water with great eagerness and apparent relish. I cannot explain why these animals seek for and feed on salt at certain seasons of the year, but it is reasonable to conclude, that an instinct so strong and so persevering was not given in vain.

There are many interesting details connected with the derangement of health resulting from the want of salt, in persons long accustomed to its use, and we have also several curious facts with respect to the effects produced by habitually using salt in large quantities, or rather by the long continued use of salt provisions. In the latter case scurvy is the consequence, in the former a distressing

train of nervous and dyspeptic symptoms. In certain parts of Asia and Africa, where no salt can be procured, European travellers have suffered very great distress. With scurvy you are all well acquainted; it exists generally among sailors who have subsisted for a long time on salt provisions, and may be frequently seen among the poorer class of people from the same cause. It is most generally combined with an enfeebled habit of body, purpura, and dropsy. Among the artisans and roomkeepers in Dublin, who live chiefly on salt meat and fish, you will meet many persons who are feeble, pale, asthmatic, and subject to hemorrhages from the nose, gums, stomach, and bowels, with a tendency to anasarca and dropsical swellings.

With respect to condiments, as salt, pepper, mustard, &c. &c., it may be observed, that they have been very extensively used for a considerable space of time, and in moderation are productive of good effects. They prevent flatulence and promote digestion, but, as in the cases of spirits, when used to excess, they produce irritation of the digestive system. I have lately seen a case of chronic inflammation of the stomach and indigestion from taking a large quantity of Cayenne pepper. It produced severe bowel complaint, with tormina and bloody stools, followed by dyspepsia, under which the patient has been labouring for the last seven months.

I need scarcely observe, that food must be varied according to the occupation of the individual. Persons who take violent exercise in the open air require a strong and highly concentrated nutriment. The natives of the Pampas, who are constantly on horseback, and ride enormous distances, fatiguing several horses in a day, are in the habit of using what is called jerked beef, which consists of the muscular parts of cows or oxen, cut into thin stripes and dried in the sun. This forms a highly nutritious food, and Captain Head gives an interesting account of the surprising fatigue he was able to undergo while living on dried beef and water alone.

You will find, also, that sleep is supplementary to food, and the more sleep a person takes the less food he requires. The man who sleeps till nine o'clock seldom eats so hearty a breakfast as the man who rises at five. In the same way soldiers when engaged in night duty, and sailors when they have additional watches in bad weather, require an extra allowance of food and drink. You will meet with many interesting facts bearing on this point in Captain Parry's account of his attempt to reach the North Pole, and from which it appears that he was obliged to increase the allowance of food during that arduous period of the expedition, when the men had scarcely any sleep for many days in succession.

I had intended to make some observations on the stature, strength, and swiftness of the human race, but as the period allotted to this part of the course has expired, I must neces-

sarily be brief, and refer you to books for further information. With respect to stature, it is a curious fact, that from the most remote ages there has existed a singular propensity among mankind to underrate the size of their contemporaries, and to represent them as diminutive when compared with preceding generations. You will find traces of this opinion in the works of various writers from the time of Homer and Hesiod down to the present period; indeed, this is carried so far in the ancient authors, that whenever an old man speaks of the stature and physical powers of men, it is only for the purpose of descanting on the degeneracy of the human race, and referring, with much complacency, to the feats of superior strength and activity which he witnessed among the tall and athletic companions of his youth. That this opinion is not borne out by facts is proved by the remains of human bones found in the most ancient burial places, and by the Egyptian mummies, as well as by pieces of ancient armour, and by an inspection of the buildings designed for the abode and accommodation of mankind in former ages. This is further strengthened by a reference to the general size and stature of those tribes or nations who have never assumed the habits of civilised society, and who still live in a condition analogous to that of the earlier races of mankind. Thus, if we examine the native Americans, Africans, and South Sea Islanders, we shall find that they do not exceed us in stature; indeed, it has been generally observed that they are inferior in height to Europeans.

The accounts given of persons of gigantic stature who lived in past ages, have been proved by the accurate researches of modern science to be nothing more than fables founded upon the anatomical error of mistaking the bones of large animals for human remains, together with the common propensity to believe and report what is marvellous. All the supposed gigantic remains have turned out to be those of the elephant or some other large animal, and there is no authenticated example on record of a man higher than eight or nine feet. The modern instances of extraordinary height are, with very few exceptions, observed among the nations of Europe. Thus a Swede, in the King of Prussia's Guards was eight and a half feet; a German in the service of Duke John Frederick, of Brunswick, Hanover, measured the same; Gilby, a Swede, eight feet Swedish; Reichard, a German, eight feet, three inches; and O'Brien, an Irishman, eight feet, four inches. Among the ancients, the Germans were remarkable for their great stature; and, among the moderns, the inhabitants of Patagonia, who are in general from six to seven feet in height.

With respect to the strength of men, the same opinions have prevailed as with regard to his size and stature. It has been asserted, that the men of the present race have degenerated from the vigour of their ancestors; and it is also maintained, that civilised man is

quite inferior in strength to the savage who roams the wilds of Africa or America. Neither of these opinions appears to be well founded; bodily strength is the result of health, exercise, and a proper supply of wholesome food; and hence the *cæteris paribus*, the well-fed classes of a civilised community may be reasonably expected to surpass the miserable savage who frequently labours under want of food and other privations.

With respect to feats of activity in the human race, many have been recorded, and much has been written, concerning the swiftness and endurance of various individuals. In this respect the Negro race does not appear inferior to whites, not to mention what has been observed by modern travellers in Africa. I refer you to the accounts given by historians of the games held at Lisbon in 1489, to celebrate the baptism of the African King Bernay. "The Portuguese monarch celebrated this event by all the exhibitions which were fashionable in that age—bull feasts, feats of dogs, and puppet-shows. Bernay took this opportunity of displaying the prowess of some of his own followers. As the principal Portuguese cavaliers were making a display of their horsemanship, he called several negroes, who, on foot, followed and kept pace with the swiftest of these animals. The same negroes leapt off a horse at full gallop, and, following, again mounted with the same promptitude as if he had been standing perfectly immovable*."

When Alexander Selkirk resided so long on an uninhabited island, he gradually acquired so much swiftness as to be able to outrun and catch the wild goats.

With respect to feats of strength in modern times, the most surprising on record are those performed by Thomas Topham, about a century ago, and of whose performances an interesting account is given in Brewster's Letters on Natural Magic. This man's strength was prodigious, being equal to 800lbs, which is double that of very strong men. This leads me to speak of gymnastics, as connected with the development of strength; and, without entering into any lengthened discussion of the subject, I may observe, that however desirable such a mode of exercise may be to those who cannot take proper exercise in any other way, they are, generally speaking, totally unnecessary for the education of the body. Natural gymnastics are constantly and extensively practised by every healthy boy and girl, unless prevented by an improper system of education. Among females it too frequently happens that wholesome exercise is neglected; and you will find, in Dr. Arnott's Treatise on Physics, a detail of the various expedients resorted to by those who educate girls to prevent them from enjoying the free and healthy use of their limbs. Boys, fortunately, are not subjected to the same restraints; and hence, if an anatomist were to visit one of their play-grounds, he

could scarcely point out a single muscle which is not repeatedly exercised during the brief space allowed for their recreations. Gymnastics certainly encourage the development and increase the power of certain muscles; and persons who exercise their muscles in this way will be so far stronger than others. But it does not follow that such persons are healthier than those who take ordinary exercise. It is a remark as old as the time of Hippocrates, that persons who practise gymnastics are in a dangerous state of health. They increase the power of the muscular system, but, if they do, it is at the expense of the rest of the body; and it was remarked of old, that the athlete and others who practised gymnastic exercises were subject to violent disorders, and were seldom long-lived.

It is difficult to prevent boys from taking too much exercise. During the period of growth great fatigue injures the general health. But even when gymnastic exercises are so managed as to avoid this inconvenience, and when they succeed in imparting to the boy an extraordinary degree of muscular development, I am perfectly convinced that the natural adjustment of the functions is thus prevented; for however well fitted the frame of youth may be for feats of agility, nature has not adapted it for strength, the attainment of which she defers until the period of growth is passed; and consequently her plans are deranged when muscular strength is artificially and prematurely obtained.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XX.

Mechanism of Parturition.

GENTLEMEN,—Before I describe to you the mechanism of parturition, or the manner in which the child passes through the pelvis and external passage during labour at the full term of pregnancy, I must call your attention to the peculiarities which adapt the female pelvis for this process; for upon an accurate knowledge of these points will in a great measure depend the correctness of your diagnosis and practice in many of the cases of difficult labour, which you will occasionally meet with in after life. Unless you are well acquainted with the dimensions of the female pelvis, it will be almost impossible for you to follow me in my description of the different presentations of the child, and the course which it follows during its passage through the pelvis.

"In comparing the adult female pelvis with that of the male we observe, that in the latter

* Di Barros, iii. 7.

the promontorium sacri projects more toward the symphysis pubis; in the former less so, by which the transit of the fœtus, through the brim, is facilitated. The ilium is more expanded, and its venter deeper in the female than in the male, to afford greater space and protection to the intestinal viscera and to the gravid uterus; at the brim, the male pelvis is round, or triangular, and contracted, and its cavity deep; while, in the female, the brim is very capacious, of an oval shape, and the basin shallow; this greater capacity of the brim enables the head to pass through with more expedition, while it also presses less injuriously upon the circumjacent parts. The greater shallowness of the pelvic cavity in the female diminishes the surface exposed to pressure during the passage of the head, and mitigates her sufferings; in confirmation of which we find, that tall females, in whom the pelvis is generally deep, and the surface exposed to pressure consequently of greater extent, suffer more than women of moderate stature, in whom the pelvis is usually shallow.

“The symphysis pubis is deeper and the pubic arch more contracted in the male than in the female; a capacious arch is a favourable circumstance for child-bearing, for when the head is in the cavity of the pelvis, a portion of it emerges through the arch of the pubes, which relieves the parts in the interior in some degree from pressure.

“In the female the concavity of the sacrum is greater than that in the male, which enlarges the cavity of the pelvis, and relieves its linings from pressure during the retention of the head, the outlet in the male is very contracted, in the female its capacity is much greater, and it has this increased by the mobility of her coccyx, all of which contribute to facilitate the passage of the fœtus. In the pelvis of a young female, under the age of puberty, we observe that the shape of the brim is round, or triangular, that its largest diameter is from sacrum to pubes, and its shortest from one os innominatum to the other; the diameters of the outlet are also reversed, for its long occupies the space between one tuber ischii and the other, and its short diameter that from the extremity of the symphysis pubis to the point of the coccyx. These peculiarities of a young pelvis continue until the individual commences to exhibit the first demonstrations of having arrived at maturity, when the short begin to lengthen progressively at the expence of the long diameters. Similar changes have been remarked to take place among the lower animals, particularly large quadrupeds*.”

The only diameters with which it is necessary you should be acquainted are the transverse, oblique, and antero-posterior or conjugate diameter; and as they vary considerably at the brim, cavity, and outlet of the pelvis, I must give you their dimensions at each. At the brim *the transverse diameter* measures

five inches, the *oblique diameter* four inches and a half, and the *antero-posterior* four inches; they vary a line or two more or less, but the whole numbers, which I have now given, are quite near enough for all practical purposes; the oblique diameter is *right* or *left*, according to the sacro-iliac spondylosis from which it is drawn; in the cavity of the pelvis the transverse diameter measures four inches, the antero-posterior also four inches, but the oblique diameter remains as before, four inches and a half; at the outlet, the transverse diameter, from one tuber ischii to the other, is four inches, the antero-posterior is now only three inches and a half, viz. from the point of the coccyx to the inferior margin of the symphysis pubis, but, from the mobility of this bone, it is capable of yielding a whole inch, thus making the antero-posterior diameter, at the moment of labour, four inches and a half; the oblique diameter of the inferior aperture, or outlet, as in the cavity, and at the brim of the pelvis, measures four inches and a half. Although the transverse is the longest in the skeleton pelvis, yet, in the natural state, when the bones are covered with their muscles, &c., the relative length of the transverse and oblique diameters is considerably changed, and this, as Levret has well observed, is still more the case during labour: the psœæ and iliacus internus muscles swell during the pains of the fourth stage, and thus occupy a greater part of the pelvis laterally, and reduce the longest diameter of the brim so much that it now becomes the shortest. Hence, gentlemen, we have to hold in mind three chief diameters during labour, of which the longest crosses the pelvis obliquely on both sides, the smaller one goes from one side to the other, and the one of medium length runs from before backwards, crossing this last at right angles; the length of the two last is liable to vary, but that of the oblique diameter seldom does. So much for the dimensions of the pelvis,—on a former occasion I mentioned to you the chief dimensions of the fetal head. But little attention was paid to the mechanism of parturition until the latter part of the last century, and from this reason the most vague and gratuitous opinions were entertained respecting the manner in which the presenting part of the child enters and passes through the pelvis and external passages. Because the head usually passes under the pubic arch with the occiput forwards, it was supposed that this was also the position which it took at the beginning of labour, viz. with the long diameter parallel to the antero-posterior one of the pelvis; this was the opinion of Mauriceau, La Motte, Levret, Stein, &c., a proof how difficult it is to ascertain the truth when such men as these were induced to form opinions so erroneous.

The first, who ventured to deviate from the beaten track, was Fielding Ould, afterwards Sir F. Ould, Physician to the Lying-In Hospital at Dublin. In his Treatise on Midwifery, which was published in 1742, he considered

* Campbell's System.

that, at the beginning of labour, the head is directed with its long diameter parallel to the transverse diameter of the pelvis. Smellie, who published his admirable work on Midwifery, ten years after the appearance of Ould's Treatise, viz. in 1752, maintained the same opinion. Ould thought that the body of the child, at the commencement of labour, took the same direction as the head did, that is with the back directed forwards, the transverse diameter of the chest corresponding to the transverse diameter of the pelvis, so that the child's head in fact was turned towards the right shoulder; this, however, was mere theory, and in this respect Smellie differed from him, for he considered that, until the body itself had entered the pelvis, it had its transverse diameter corresponding, or parallel, to the antero-posterior one of the pelvis.

In 1770, Deleurye published his *Traité des Accouchemens*, wherein he agreed completely with Smellie, and this was the first change which took place in France respecting the mechanism of labour since the time of Mauriceau.

In the following year, viz. 1771, an inaugural dissertation, entitled "De diverso Partu ob Diversam Capitis ad Pelvim Relationem mutuum," was published by Matthias Saxtorph at Copenhagen, and at the same time a similar dissertation appeared at Paris, by Solayres de Renhac, Professor of Medicine at Montpellier, on his being admitted into the Royal College of Surgery, entitled "De Partu Viribus maternis absoluto;" the author died immediately after the publication of it, before he was able to defend it. Baudelocque, who was the pupil of Solayres, has translated and inserted the chief of it into that part of his great work on Midwifery, which treats of this subject; this circumstance he has candidly mentioned, and has taken the opportunity to speak very highly of his former teacher.

Saxtorph and Solayres de Renhac were the first who described the mechanism of labour correctly, viz. that *the sagittal suture (in the most common position) was parallel to the right oblique diameter of the pelvis, the posterior fontanelle directed forwards to the left*, and it is not a little remarkable, that two such valuable and original dissertations should have appeared at the same time, and in all probability without the authors being aware of each other's existence. Plenck has translated Saxtorph's Dissertation into his *Elementa Artis Obstetriciæ*, but without owning from whence he had taken it. Since this period, all the manuals, compendia, systems, outlines, &c. of midwifery, which have been published in such liberal profusion, have been copied more or less from Baudelocque's great work, wherever they treat of the mechanism of parturition,—thus Osiander, Siebold, Jorg, &c. in Germany; Duges, Maygrier, &c. in France; Burns, Dewees, &c.

As it is necessary for you to be acquainted with the various positions in which the head

is said to enter the pelvis at the beginning of labour, according to the different works on midwifery, I shall enumerate *them* first, and, having given you a short account of the presentations of the child, as they appear in books, I shall enter more fully into the description of those few which occur in nature.

The first position of the head, which is allowed by all to occur more frequently than any other, is where the sagittal suture is parallel to the right oblique diameter of the pelvis, the posterior fontanelle being turned forwards, and to the left.

The second position, in which the sagittal suture corresponds to the left oblique diameter, the posterior fontanelle being directed forwards and to the right.

The third position, where (as in the first) the sagittal, or long diameter of the head, corresponds to the right oblique diameter of the pelvis, but the anterior fontanelle is forwards and to the left.

The fourth position has the sagittal suture parallel to the left oblique diameter, the anterior fontanelle forwards and to the right.

These are the position of the head, gentlemen, according to the German schools, and they have a great superiority over those of the French and English schools, inasmuch as they are nearer the truth, and far more simple. Baudelocque has made *six* positions of the vertex, viz. four, as I have just described, and two others with the sagittal suture running parallel to the antero-posterior diameter of the pelvis, in the one (his third position) the posterior fontanelle corresponding to the symphysis pubis, in the other (his sixth) to the sacrum; these positions have been properly rejected by the German schools as not occurring in nature.

The proper and correct position of the head was formerly supposed to be where its long diameter was parallel to the antero-posterior diameter of the pelvis. The works of midwifery tell us that the head *must* make a turn as it enters the pelvic cavity, so that its long diameter shall be parallel to the antero-posterior one of the pelvis, with the face turned into the hollow of the sacrum, and that then, on account of the inclined plane, which the sacrum, coccyx, and sacro-sciatic ligaments offer to it, it is compelled to advance with the occiput forwards under the pubic arch.

At the beginning of labour, or a little before this period, the os uteri is situated high up, and backwards. You will feel it, gentlemen, in the upper part of the hollow of the sacrum. If, therefore, as Baudelocque asserted (and indeed as almost every work after him on midwifery has done), the head presents with the vertex, the sagittal suture should be that point of the cranium which is lowest, and which the finger during examination first touches upon. Now this is *not* the case, gentlemen, for, as Smellie first observed, at the beginning of labour, when the os uteri is dilated sufficiently to admit the finger, we feel the sagittal

suture crossing it, dividing it unequally. Now I have already told you that the os uteri at this period corresponds to the upper part of the hollow of the sacrum, the sagittal suture, therefore, must also be turned in this direction, the perpendicular diameter of the head being oblique or parallel to the axis of the brim, or, in other words, to a line drawn from the centre of the brim through the umbilicus. The part which the finger first touches upon, in the first or most common position of the head, is the right parietal protuberance; this is the part which is lowest in the pelvis, and which is pierced in cases of perforation. Therefore *the correct and real position of the head at the beginning of labour, is with the sagittal suture crossing the os uteri, the parietal protuberance situated lowest in the pelvis.* Instead of the posterior fontanelle being always lower than the anterior fontanelle, one is frequently felt as low as the other, and not uncommonly the anterior deeper in the pelvis than the posterior fontanelle.

The head as it enters the pelvic cavity in the first position, does *not* turn with its long diameter into the antero-posterior diameter of the pelvis, and the face into the hollow of the sacrum, it enters and passes through the cavity of the pelvis with the posterior fontanelle corresponding to the left foramen ovale, the sagittal suture (and, therefore, the long diameter of the head) parallel to the right oblique diameter of the pelvis. The head, also, does *not* advance under the pubic arch with the occiput forwards, but *it is the posterior and superior quarter of the right parietal bone which first emerges*; it is the right branch of the lambdoidal suture, which comes out parallel to the left descending ramus of the os pubis. Thus, gentlemen, the mechanism of parturition in the most common position of the head is very simple, much more so than many works on midwifery would make it appear to be. The head enters the superior aperture of the pelvis *obliquely*, passes through its cavity *obliquely*, and emerges from the inferior aperture *obliquely* also.

When there is not much liquor amnii, the os uteri rigid, and the head firmly pressed upon it, or where the waters have been discharged at the beginning of labour, a swelling of the cranial integuments forms exactly on that part of the head which had corresponded to the os uteri, viz. on each side of the sagittal suture, this I need hardly tell you is produced by the obstruction to the circulation in the scalp, from the pressure which the os uteri exerts upon it; as the os uteri dilates, and as the head gradually alters its situation, it disappears in part, and now forms upon the posterior and superior quarter of the right parietal bone, or that portion of the head which first enters the vagina and external opening. Let me ask you, gentlemen, where would this swelling of the scalp be, if the head came into the world with the occiput forwards? The first mentioned swelling is produced by the pressure of

the head against the os uteri, the second, by the pressure of the head against the vagina and os externum,—we have no term for it in English, its Latin denomination is *caput succedaneum*. If the head presented with the sagittal suture in a line with the antero-posterior diameter of the pelvis, it would also be in a line with the os externum, but this is not the case, for it crosses the left labium at an acute angle, nor does the face of the child turn directly towards the right thigh of its mother as the shoulders are passing through the pelvis, but obliquely backwards, and to the right.

According to the works on midwifery, the position of the head, which, after the first, is the most frequent in point of occurrence is the *second*, viz. where the sagittal suture is parallel to the left oblique diameter of the pelvis, the posterior fontanelle corresponding to the right foramen ovale; this, as the late Professor Von Siebold of Berlin remarked, sometimes occurs so frequently, that for two months almost all the labours at the lying-in-hospital to which he was attached, were with the head in this position; in this position the head is said to follow precisely the same course as in the first, the face turns into the hollow of the sacrum, and the occiput thus comes first under the pubic arch.

After the second position of the vertex, according to the works on midwifery, that position which is known as the *third* should be the next in point of frequency, viz. where the sagittal suture is parallel to the right oblique diameter, the posterior fontanelle corresponding to the right sacro iliac synchondrosis, the anterior to the left acetabulum.

We are told that as the head descends through the pelvic cavity, the forehead turns gradually forwards until the sagittal suture corresponds to the antero-posterior diameter of the pelvis, the occiput being in the hollow of the sacrum, but as the forehead is too broad and flat to pass under the pubic arch, it is gradually forced upwards by the continued action of the pains behind the symphysis pubis, whilst the occiput descends, and presses against the perinæum, which it distends immensely, nor does the forehead clear the arch of the pubes until the occiput is born. In this manner the head is said to pass through the pelvis in the third position, and we are told that it is a presentation which requires unusually powerful pains and favourable proportions for its completion.

The fourth position of the vertex is said to differ from the third, merely inasmuch as the sagittal suture corresponds to the left instead of the right pelvic diameter, the forehead has to undergo the same pressure against the pubes, by degrees the occiput is forced down and made to sweep over the distended perinæum in the same manner as in the preceding case. "From an experience of twenty-eight years (says Professor Nægele), I must confess that this by no means agrees with my observations, one author has imagined it, and

the others have copied from him; according to them the third position of the head should be of far less frequent occurrence than the second. I have (says this distinguished accoucheur) observed as many labours as any person in Germany, and from my observations, which for many years I have made with the greatest possible care and attention, the third position, after the first, is by far the most frequent in occurrence of all the head presentations; on the other hand, the second position of the head, which has been supposed to be so frequent, occurs as an original presentation very rarely*. Thus, for example (says he), out of a hundred labours where the head presented, and which I carefully observed from the very first commencement of the pains till their termination, the third position of the vertex occurred twenty-nine times; of thirty-six labours which occurred at the infirmary of this place, from the beginning of the year 1821 till the present time (Feb. 1821), I counted twenty-two with the vertex in the first position, eleven with it in the third, two presentations of the nates, and one of the face. According, however, to the observations which I have hitherto made, the proportion of the third vertex position to the first, with respect to the frequency of their occurrence, is as one to two and a half. During the time that I saw ninety-six cases of the third vertex position, the fourth occurred only twice, and of more than twelve hundred, which I carefully observed and noted with particular accuracy, I do not find a single instance of the head having been originally in the *second* position. From the observations which I have made (says Professor Naegele), I am thoroughly convinced that in cases of the third and fourth position of the head or vertex, in the more advanced state of labour, the occiput is *not* usually turned into the hollow of the sacrum, but that in cases of the third position of the vertex, where the labour has advanced considerably, the posterior fontanelle is turned from the vicinity of the right sacro-iliac synchondrosis to the right foramen ovale, and in the fourth position, from the left sacro-iliac synchondrosis to the left foramen ovale, and in this manner it clears the external passages. That this change of the third position into the second, and of the fourth into the first, requires no peculiarly favourable circumstances, and that these species of labours can be completed under the most usual proportions of the active and passive momenta which relate to the mechanism of childbirth, by the natural means, in the same time, with the same expense of strength, without greater difficulty, &c., than that species of labour where the head takes the first or most common position †." Baudelocque, it is true, owns that in the third or fourth, or what he calls

fourth and fifth, positions of the vertex, the head, instead of coming with the forehead under the pubes, will *sometimes* make a turn, and come out with the occiput forwards; several authors after him have noticed this fact, but it was always looked upon as a very rare occurrence, and deemed an unhopd for termination to a decidedly unfavourable position of the head. It has been said that this change in the position of the head only occurs in cases where it is very small, and the pelvis unusually roomy and large; this is not the case, gentlemen, for I have seen very large heads born in this position without any unusual difficulty, nor does this position occur so rarely as has been stated, for, according to Professor Naegele's experience, it occurs in the proportion of two to five of the first position, and this has been confirmed by the observations of Dr. Stolz, of the Lying-in-Hospital at Strasburg, Dr. Ulsamer, of the Lying-in-Hospital at Würzburg, and by myself, at the General Lying-in-Hospital in this metropolis.

"The manner in which the head," says Professor Naegele, "when in the third vertex position, is directed during labour and moves through the pelvic cavity, is, according to my observations, as follows:—At the beginning of the second period of labour, and in those who have already borne children even earlier, the great fontanelle is felt directed toward the left acetabulum, and the smaller one to the right sacro-iliac synchondrosis, nearly at an equal height, sometimes the one, sometimes the other, being reached with greater facility. As the *right* parietal protuberance in the first position of the head is the most depending part, so in this case it is the *left*. When the point of the finger is brought in contact with the head, in the direction of the central line of the pelvic cavity, it touches the protuberance of this bone. As the head enters and presses through the superior aperture of the pelvis, the anterior fontanelle corresponds always to the left foramen ovale, as the posterior one does in the first position, and as soon as the head has engaged in the cavity of the pelvis, the great fontanelle turns towards the ascending ramus of the left os ischium, and both can be felt at an equal height as to each other. As soon as the head experiences the resistance which the inferior part of the pelvic cavity opposes to it, or, in other words, the oblique surface which is formed by the lower end of the os sacrum, the os coccygis, the ischiatic ligaments, &c., by which it is compelled to move from its position backwards in a direction forward, it turns by degrees with its great diameter into the left oblique diameter of the pelvic cavity; viz.—the posterior fontanelle is directed to the right foramen ovale, and, as the head approaches nearer and nearer to the inferior aperture, it is the posterior and superior quarter of the left parietal bone which is felt in the cavity of the pelvis opposite to the pubic arch, so that when the point of the

* M. S. lectures.

† Mechanism of Parturition.

finger is introduced under and almost perpendicular to the symphysis pubis, it touches nearly the middle of the posterior and superior quarter of the left parietal bone; and this is precisely the part, as the head advances further, which first distends the labia, with which the head first enters the external passage, and the spot upon which the swelling of the integuments forms itself. As in cases of the first position of the head the posterior fontanelle is usually directed to the *left* when the head passes the external passages, so in this case it is mostly directed to the *right*.*

It may reasonably enough be asked why has the third position remained so long misunderstood, and to a degree unknown?—To this I would allege in answer, 1st, the difficulty of forming a correct diagnosis; 2nd, a person in examining per vaginam is always sure to find what his teacher tells him he is to find, and is naturally rather inclined to attribute any deviation which he may have perceived to his own want of accuracy and inexperience in touching; 3rd, the very circumstance of the third position passing into the second is quite enough to give rise to much deception, because an accoucheur, who at the beginning of labour had ascertained that the anterior fontanelle corresponded to the left foramen ovale, would, on finding afterwards that the *posterior* fontanelle corresponded to the *right* foramen ovale, be much inclined to doubt the accuracy of his first examination; 4th, the difficulty of distinguishing the posterior from the anterior fontanelle is very great. On tracing the finger along the sagittal suture, and coming to a fontanelle, where the edges of the bones are riding over each other, we are disposed to consider it the posterior fontanelle. Now this is by no means always the case, because the bones of the coronal suture will frequently do the same: we can only distinguish by being able to decide whether it be three or four sutures which meet together. In the posterior fontanelle, when in the first position, you will feel a suture branching off from the sagittal suture *forwards*, but none *backwards*; whereas, if it be the anterior fontanelle, a suture will be felt running *backwards* also.

"In the former part of my practice," says Professor Naegele, "not knowing that the head made this turn, I always concluded that my examinations in the early part of labour had been incorrect, and was very uneasy that I did not find it all exactly as the books described, and attributed my want of success in ascertaining the position to my own awkwardness. At length, in a private case in which I was much interested, I again felt what I thought was the anterior fontanelle towards the left foramen ovale, and circumstances occurring which rendered it necessary to apply the forceps and terminate the labour, I found that the head had been actually in the position which I imagined I had felt. Since this time

I have in many cases sat by the bed-side during the whole labour with my finger upon the head, and thus come at the truth*."

The *fourth position of the head*, from its rare occurrence, has not been so much observed as the first and third positions, but from the cases which have come under Professor Naegele's notice, and from those which I have myself had the opportunity of observing, it follows precisely the same course as the third position does.

These positions of the head, which we have now been treating of, and which occur most frequently, have been called by the French and English schools *positions of the vertex*, in Germany they are called positions of the occiput, but in this respect the former is nearer the truth: to speak correctly, they should be called *positions of the parietal bone*. Positions of the parietal bone have been described by some authors as being unfavourable, on account of the two fontanelles being frequently found equally low in the pelvis. This is quite a mistaken notion, for I constantly meet with the anterior fontanelle just as low in the pelvic cavity as the posterior one, and yet no difficulty to the progress of labour results; nor do the shoulders enter the superior aperture of the pelvis in the transverse diameter, and, as they advance lower, turn into the antero-posterior diameter of the cavity and outlet. As with the head, so with the shoulders, gentlemen; they enter the superior aperture obliquely, pass through the cavity of the pelvis obliquely, and emerge from the inferior aperture obliquely also.

At my next lecture I shall describe the presentations of the face and nates.

Reviews.

The Principles of Physiology applied to the Preservation of Health and to the Improvement of Physical and Mental Education. By ANDREW COMBE, M.D. pp. 404. Maclachlan. 1835. Third edition, revised and enlarged.

DR. COMBE is so eminently distinguished as an erudite philosopher and an accomplished author, that no encomiums of ours could enhance his reputation or assist in perpetuating his fame. The present work has passed to the third edition within the space of twelve months, a circumstance amply sufficient to stamp its character and its worth. That we may do justice to it, it will be necessary for us, in the first place, to refer, in a general manner, to its contents, to point out especially the more important subjects upon which it treats, and, secondly, to give such extracts as those of our readers who may not have seen the original may be enabled to form an estimate of its value and importance.

* Mechanism of Parturition.

* MS. Lectures.

The great subject which it is the object of the author to treat, is one of vital moment, one which involves the best interests of humanity, which teaches man the nature of his physical and mental conditions, and tells him of the agents which surround him, both those which are essential to his well-being and his existence, and those which may be inimical to his health or destructive to his life.

We have had numberless writers on the art of preserving health and of prolonging life, from Aristotle down to Sir John Sinclair's "Code;" rules have been laid down which to break would be death. Men are not the same everywhere; the Esquimaux infant, that would lie in the canoe and feast upon blubber does that which would be almost inevitably destructive to an European infant. We are creatures of circumstance and habit; we revel in the luxuries of the earth, and we suffer from the effects of gluttony. If asked—what is the cause of the chief ailments to which flesh is heir? we answer, *instantly*, errors in diet. What is the primeval cause?—*civilisation!*—as civilisation progresses our diseases multiply in number and augment in intensity. The savage of North America, if we credit the records of travellers, is subject to but few diseases; he does not sicken from disorders of the liver, or waste away from phthisis; his life is one of almost incessant activity; he hunts the forests for wild animals to support him during summer, and he pickles the denizens of the ocean for his winter fare. The pampered citizen of Europe feeds his stomach with the products of his native land commixed with the spices of the Indies; he takes turtle-soup and roast-beef in the evening and a black draught in the morning; his life is, like his stomach, one incessant toil and anxiety. But, to leave this region of metaphysics, let us come to a more useful topic,—the author's work.

In his preface the author propounds his reasons for publishing the work; he believes that if the public were aware of the simple yet fine machinery of which our bodies are composed, they would be more capable of discriminating when medical advice is needed, and be better able to avert its aggression, by those simple rules which are laid down for us by nature. "A little knowledge is a dangerous thing," so saug the poet; it may be so in poetry, but we affirm it is not so in medicine. If the chief study of mankind be man, what subject more obviously claims his attention than his physical constitution, its nature and secret workings, the springs that bend and the wheels that revolve, in sweet harmony, in health, in discord, in disease?

The author condemns the practice of non-medical people prescribing for their own complaints, or even for those of others, but strongly urges the public to obtain some knowledge of medicine.

In the first chapter are discussed the subjects of the physiology of animals and vegetables, the distinction between organic and inorganic bodies, objects and utility of physiology, its application, evil results of ignorance on this topic, "what health is, and how to be preserved." The distinction between organised and inorganised bodies has never been clearly drawn; the attempt has often been made, but the last link has always been imperfect, they run, like the animal into the vegetable kingdom, imperceptibly into each other: the author employs only the old arguments to establish the line of demarcation. On the injurious effects accruing to individuals from their ignorance of the relations which subsist between themselves and surrounding bodies, many marked illustrations are adduced. He relates a case of two seamen, who had slept on board one night in harbour, and from closing the skylights too closely the ingress of air into the cabin was prevented, so that in the morning they were both found "almost dead through suffocation," having, he supposes, exhausted the whole of the oxygen of the atmosphere contained in the room. This circumstance, it is fairly presumed, might and would have been prevented, had the sailors known something of the nature of respiration, of the composition of the atmosphere, and its relation to the lungs and the system. An example is given, showing a similar effect of ignorance of physiology. "It is well understood among professional men, that in speaking, singing, and playing upon wind instruments, the lungs are called into play as powerfully as in running, or any other species of severe muscular exercise. From not adverting to this fact, a strongly constituted individual, who brought on spitting of blood by bodily labour, to which he had not been accustomed, conceived himself perfectly safe and even cautious, when he gave up the spade, and confined himself to talking a great deal, which he did daily to numerous visitors, in explanation of favourite views then occupying all his thoughts. The consequence was, that the prescribed treatment was without effect, and a fatal illness was brought on. When the action of the lungs was subsequently explained to this individual, he saw at once the error into which he had fallen." On the subject of idiosyncrasy, some judicious reflections appear. On the opinions of the people of the utility of *this* article of diet or clothing, or the injurious tendency of *that*. For example, "one person will affirm, with perfect sincerity, that flannel is pernicious, because it irritates the skin, and uniformly causes an eruption over the whole body, and that linen or cotton is an excellent article of dress, because it produces no such consequences," and so forth. The vulgar believe that what is (to use an old adage) "food for a goose is food for a gander," that because flannel agrees with me, it must therefore be useful to you; the circumstance requires no

more than a simple notice to establish its fallacy.

The anatomy and physiology of the skin are next brought under discussion, in which are shown its bearings on health. He concludes that the skin performs some important functions, that of expelling from the system some of its effete materials, and that it is a regulator of the animal temperature, and also that effluvia may pass through it by absorption. He notices, fully and accurately, the connexion between the skin and other secretory organs of the body, that, if the skin's function becomes disturbed, other parts of the body may suddenly become deranged. On warm clothing are the following apposite remarks:—

“The advantages of flannel, as a preservative from disease in warm as well as in cold climates, are now so well understood, that in the army and navy its use is cogently and with great propriety insisted on. Sir George Ballingal, in his valuable Lectures on Military Surgery, p. 92, has some very judicious remarks on the influence of warm clothing in preserving the health of soldiers; and, after adducing the testimony of Sir James Macgrigor to show that in the peninsula the best clothed regiments were generally the most healthy, Sir George adds, that, when in India, he had himself a striking proof of the utility of flannel in checking the progress of a most aggravated form of dysentery in the second battalion of the Royals. Captain Murray, also, late of H.M.S. Valorous, told me he was so strongly impressed from former experience with a sense of the efficacy of the protection afforded by the constant use of flannel next the skin, that when, on his arrival in England, in December 1823, after two years' service amid the icebergs on the coast of Labrador, the ship was ordered to sail immediately for the West Indies, he ordered the purser to draw two extra flannel shirts and pairs of drawers for each man, and instituted a regular daily inspection to see that they were worn. These precautions were followed by the happiest results. He proceeded to his station with a crew of 150 men, visited almost every island in the West Indies, and many of the ports in the Gulf of Mexico; and, notwithstanding the sudden transition from extreme climates, returned to England without the loss of a single man, or having any sick on board on his arrival. It would be going too far to ascribe this excellent state of health solely to the use of flannel, but there can be little doubt that the latter was an important element in Captain Murray's success. Far, however, from trusting to it alone, Captain Murray was as careful in guarding against other sources of disease, as against variations in temperature; and with this view every precaution was at the same time used, by lighting stoves between decks, and scrubbing with hot sand, to ensure the most thorough dryness, and proper means were put in practice to promote cheerfulness among the men. When in com-

mand of the Recruit gun-brig, which lay about nine weeks at Vera Cruz, the same means preserved the health of his crew, when the other ships of war anchored around him lost from twenty to fifty men each.

“That the superior health enjoyed by the crew of the Valorous was attributable chiefly to the means employed by their humane and intelligent commander, is shown by the analogy of the Recruit; for, although constant communication was kept up between the latter and the other ships in which sickness prevailed, and all were exposed to the same external causes of disease, yet no case of sickness occurred on board the Recruit. Facts like these are truly instructive, by proving how far man possesses the power of protecting himself from injury, when he has received the necessary instruction, and chooses to adapt his conduct to his situation.”

The next chapter is on the “Nature of Muscular Action,” its conditions during action and when in a state of repose. The evils attendant upon long-continued and frequent action of any series of muscles are eloquently unfolded. We know that it is the character of a voluntary muscle to act in obedience to the will; we also know that the continuance of any individual contraction is exceedingly limited; the familiar illustration well exemplifies it:—one man wagers another that he cannot hold a poker in his hand with the arm extended horizontally for ten minutes; the wager is accepted; with energy the champion enters the arena, but after four or five minutes the deltoïd aches, soon he feels a diminished power, and ultimately he is obliged to desist from the experiment. In the case of a young lady sitting to the drawing table, she leans to the left side, the spinal muscles on the opposite side become put upon the stretch, nay, they are truly in a state of permanent contraction for the purpose of sustaining the body; they are retained in this strained position for an hour or more, until they become fatigued and painful, so that, after the lesson is over, and the body restored to its perpendicular state, there is a tendency to bend to the opposite side. This same unnatural condition takes place two or three times a week, or perhaps daily. The muscles on the left side become permanently shortened, and, as the inevitable consequence, curve the spine to the right side—make the convexity in that direction.

The author alludes to the injuries tight stays inflict upon the delicate young girl at school, by interrupting the free play of the muscles. “Girls thus restrained daily for many successive hours invariably suffer, being deprived of the sports and exercise after school hours which strengthen the muscles of boys, and enable them to withstand the oppression. The muscles being thus enfeebled, the girls either lean over insensibly to one side, and thus contract curvature of the spine, or, their weakness being perceived, they are forthwith cased in stiffer and stronger stays, that support being

sought for in steel and whalebone which Nature intended they should obtain from the bones and muscles of their own bodies. The natural consequences of this treatment are, debility of the body, curvature of the spine, impaired digestion, and, from the diminished tone of all the animal and vital functions, general ill health; and yet, while we thus set Nature and her laws at defiance, we presume to express surprise at the prevalence of female deformity and disease!" These are some but not all the banes of boarding schools. Dr. Forbes states that he visited a boarding school in which there were forty girls, that there was not one girl who had been at the school two years who "*was not more or less crooked!*" This does absurd custom make monsters of the fairest of the human species.

We come next to the influence of muscular activity upon the mind, and *vice versa*. The French army, when retreating from Moscow, became depressed in courage and enfeebled in body, and sunk nearly to the earth through exhaustion and cold; but no sooner did the Russian guns sound in their ears, or the gleam of their bayonets flash in their eyes, than new life seemed to pervade them, and they wielded powerfully the arms which, a few moments before, they could scarcely drag along the ground. No sooner, however, was the enemy repulsed, and the nervous stimulus which animated their muscles withdrawn, than their feebleness returned."

Full exercise for the young is strongly recommended, and few will doubt the justness of the recommendation. Games of every active kind,—shuttlecock and battledore for the young. "Some love the manly toils, the tennis some, and some the graceful dance." With all kinds of playful exercise, that it may be beneficial, must be joined with amusement,—society is the very bond of happiness. "The toil you hate fatigues you soon, and scarce improves your limbs." Dumb-bells, gymnastic exercises, riding, reading aloud, and recitation are all, in moderation, good species of exercise.

On the enlisting of soldiers for the army we notice interesting observations, worthy the attention of the legislature. Very young men, say under twenty, who have not arrived at the age of maturity, cannot bear long marches. Napoleon, after the battle of Leipsic, claimed of the senate a re-inforcement to his army, and so well aware was he of the insufficiency of young men, that he said, "I demand a levy of 300,000 men, but I must have grown men, boys serve only to encumber the hospitals and road-sides." Regular exercise is one of the best means of acquiring strength. In the Memoirs of Marshal Ney we find some remarks on this subject so apposite, that we are tempted to extract them:—

"One of the greatest difficulties in war is to accustom the soldier to the fatigues of marching. The other powers of Europe will attain, with difficulty in this respect, the degree of perfection which the French soldier possesses.

His sobriety and physical constitution are the real causes of the marked superiority he has acquired over the Austrians in that particular.

"Rapidity of march, or rather an able combination of marches, almost invariably determines the fate of war. Colonels of infantry, therefore, should be indefatigable in their endeavours to train their soldiers progressively to ordinary and forced marches. To attain that object, so essential in war, it is indispensable to oblige the soldier to carry his knapsack on his back from the outset of the campaign, in order to accustom him to the fatigues which in the course of it he must undergo. The health of the soldier depends on this being habitual; the men are economised by it; the continual loss, by partial and frequently useless combats, is avoided, as well as the considerable expenses of hospitals to government."—II. 410, 411.

We travel through the chapter on the skeleton to the next, which is on the lungs, influence of impure air inhaled by the lungs on the animal system, ventilating of buildings, exercise of the lungs in health and disease, *cum multis aliis*. We perfectly coincide with the following observations:—"Judicious exercise of the lungs is one of the most efficacious means which we can employ for promoting their development, and warding off their diseases. In this respect, the organs of respiration closely resemble the muscles and all other organised parts. They are made to be used, and if they are left in habitual inactivity, their strength and health are unavoidably impaired, while, if their exercise be ill-timed, or excessive, disease will as certainly follow." Dr. Combe recommends singing, speaking aloud, and crying,—the latter species of exercise in children seldom requires to be enforced. In young people, who have a tendency to phthisis, and have narrow chests, he suggests "rowing a boat, fencing, quoits, &c." In all such cases, however, it must be observed, that there shall be no active pulmonary disease, if so, the remedy would be worse than the disease.

We now arrive at the eighth chapter, which treats of the nervous system; here the Doctor is in his own element,—phrenology is made to bear most effectively on the great machinery of life. The connexion between the mind and the brain, and the reciprocal influence they exert upon each other in health and disorder, give rise to many useful reflections. The Doctor endeavours to show that if the brain becomes excited by the ingress of an inordinate quantity of blood, the mind becomes proportionately exalted in its manifestations; and that if the mind be excited the vessels of the brain take on an increased action, and the face flushes, and the temples throb, and the eyes sparkle.

The author conceives hypochondriasm, and those ill-defined and intelligible maladies, 'yclept "*nervous diseases*," to be frequently the effect of a want of exercise of the mind; "let the situation of such persons be changed

(he says), bring them, for instance, from the listlessness of retirement to the business and bustle of a town, give them a variety of imperative employments, and place them in society, so as to supply to their cerebral organs that extent of exercise, which gives them health and vivacity of action; and, in a few months, the change produced will be striking." Such an alteration the Doctor attributes to changes in the brain. We attribute them to the mind, the soul becomes roused prior to the cerebral excitement. He notices over-excitement, over-action of the brain, as inducing disease and premature death. "Whitbread, Romilly, Castlereagh, Canning," and he might have added Byron, Shelley, and a host of others, goaded on by ambition, impelled to almost unremitting action, which the fragile frame could not sustain.

Early tuition of children, and long school hours are warmly and very properly deprecated. The body is sacrificed to mental cultivation. At page 289 are the following remarks:

"At any time of life excessive and continued mental exertion is hurtful; but, in infancy and in early youth, when the structure of the brain is still immature and delicate, permanent mischief is more easily inflicted by injudicious treatment than at any subsequent period; and, in this respect, the analogy is complete between the brain and other parts of the body, as we have already seen exemplified in the injurious effects of premature exercise of the bones and muscles. Scrofulous and ricketty children are the most usual sufferers in this way. They are generally remarkable for large heads, great precocity of understanding, and small delicate bodies. But, in such instances, the great size of the brain and the acuteness of the mind are the results of morbid growth, and, even with the best management, the child passes the first years of its life constantly on the brink of active disease. Instead, however, of trying to repress its activity, the fond parents, misled by the early promise of genius, too often excite it still farther by the unceasing and never failing stimulus of praise and emulation; and, finding its progress for a time equal to their warmest wishes, they look forward with ecstasy to the day when its talents will break forth, and shed a lustre on its name. But in exact proportion as the picture becomes brighter to their fancy, the probability of its being realised becomes less; as the brain, worn out by premature exertion, either becomes diseased or loses its tone, leaving the mental powers slow and depressed for the remainder of life. The expected prodigy is thus ultimately and easily outstripped, in the social race, by many whose apparently dull outset promised him an easy victory.

"Taking for our guide the necessities of the constitution, it will be obvious, that the modes of treatment, commonly resorted to, ought to be reversed, and that, instead of straining to the uttermost the already irritable powers of

the precocious child, and leaving his dull competitor to ripen at leisure, a systematic attempt ought to be made, from early infancy, to rouse to action the languid faculties of the latter, while no pains ought to be spared to moderate and give tone to the activity of the former. Instead of this, however, the prematurely intelligent child is generally sent to school, and tasked with lessons at an unusually early age, while the healthy but more backward boy, who requires to be stimulated, is kept at home in idleness, perhaps for two or three years longer, merely on account of his backwardness. A double error is here committed, and the consequence to the clever boy is frequently the permanent loss both of his health and of his envied superiority of intellect."

We have given but a few extracts, yet amply sufficient to represent the character of Dr. Combe's work. The spirit of philosophy and philanthropy that breathe through its pages, with the multitude of useful maxims it comprises, urge us strongly to recommend its study to the public at large, and its careful perusal to the profession. It is assuredly one of the most valuable productions of the present day.

The Nature of Cholera. By JOHN G. FRENCH, M.R.C.S., &c. Pamphlet. Livingston. 1835.

The author of the present pamphlet wrote it, no doubt, at the request of some practical friends, and to them he will, no doubt, present it, for we assure him no one who wishes to study the nature of cholera, or to explore further its hidden and mysterious recesses, or to acquire a more efficient mode for its treatment, would be a whit the wiser after the perusal of Mr. French's production. It is true, it contains a few excellent truisms, but they are few in number, and have been much better told before. We do not wish to check the *amor scribendi*, for to write on any subject however trite it may be, and however feeble the efforts, it yet gives a spur to the mind of youth. It teaches him to learn the art of arranging his ideas on any given question in a more methodical manner, and of thinking more correctly. Mr. French's next pamphlet will, we have no doubt, evince an improvement.

"My aim," he states, "in the following pages is to prove that the disease essentially consists in paralysis of the heart; and to show that the consequent symptoms constitute the means by which nature attempts to remedy the evil, analogous to the remedial means she employs in repairing any mechanical injury to the animal frame." The first position he does not prove either by fact or analogy, and the second is so enveloped in obscure phraseology as not to be intelligible. As nature relieves the system by discharges, so the physician should do so likewise, bleed, &c. So they have, but the patients *would die*, Mr. French.

ADVOCACY OF THE SEDATIVE PLAN
OF TREATMENT IN PUERPERAL
CONVULSIONS, AND OBJECTIONS TO
THE INTERMEDIATE TREATMENT.

BY J. H. HORNE, ESQ., M.R.C.S.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,—Among the numerous varieties of diseases which we find come within the powerful, but sanative, influence of opium, when administered as a sedative, we may safely class *puerperal convulsions*; the first symptoms of which not unfrequently manifest themselves prior to the completion of the process of parturition, as in the interesting, and, I may add, instructive, case related by Dr. Cammack in No. 160 of your spirited Journal. To the gentleman who conducted the labour it may perhaps seem unaccountable why the poor woman had symptoms of convulsions ("her screams were violent, finishing with an agitated giggle,") prior to delivery, at the time of delivery disappear, and shortly after delivery reappear. This arose from the sudden, but not lasting, depressing effects of parturition, which, had Mr. Foote taken advantage of by bleeding, as soon as the disturbance commenced, the labour would have been expedited, and probably a return would not have occurred, and the good effects usually produced by the bleeding been followed by the exhibition of a sedative as soon as the child and placenta were expelled.

Dr. Cammack's treatment, I believe, will be considered more verging on the stimulant than the sedative plan, or a mixture of both. Bleeding produces sedative effects, but, if followed by the exhibition of stimuli, they are speedily overcome, and thus, by the alternating or intermediate treatment that has been pursued for ages, the patient not unfrequently perishes. Cases of puerperal convulsions are so common in this metropolis, especially among the poorer classes, that frequent opportunities present for trying the efficacy of any particular treatment that may be offered. For my own part, I am perfectly convinced, from ample cases, that, if the sedative treatment be strictly adhered to, it will prove more successful than any other that has hitherto been recommended. I do not wish it to be conceived that I arrogate to myself as being the first promulgator of this successful treatment, but still that I am ignorant who fairly claims it I must confess. From the very apposite remarks that have been made to me, since I attempted to direct the attention of the Profession to the subject, I am surprised to find that many confine the action of a sedative to the sedative principle of opium alone, and consider that if any other means be used (to induce sedative qualities), it can no longer be considered as sedative. If they mean (but certainly they do not express them-

selves as such) that opium is the best sedative we possess, I agree with them; but there are certain diseased conditions of the system which must first be corrected, or otherwise they will baffle our efforts to produce the desired state, even with opium. The combination of sedatives which I use are bleeding, the application of cold, opium, and digitalis; and when fully induced, I believe I may add that opium will most satisfactorily be found to keep the system in that condition without producing any ill effects longer than any other sedative we possess.

I am, Gentlemen,
Your obedient servant,
J. H. HORNE, Surgeon.

5, Gerrard-street, Soho,
Feb. 24, 1835.

REMARKS ON DR. ELLIS'S STATE-
MENTS ON INSANITY.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,—In your Journal of the 14th inst., Dr. Hay Graham, in his lecture on Insanity, states, that on a recent visit he made to Hanwell Pauper Lunatic Asylum, he was told by Dr. Ellis, the director of it, that "every case of insanity, whatever might be its cause, whether moral or physical, is attended with inflammation of the white (or misnamed *medullary*) substance of the brain!"

As inflammation of this substance has been hitherto considered a rare occurrence by the most eminent anatomists who have made the pathology of insanity the subject of their researches, I cannot yield my conviction without further evidence to this opinion of Dr. Ellis.

Numerous pathologists have declared that they could not discover even a trace of alteration in the brain or its membrane upon the most careful *post mortem* examination of the corpses of lunatics. I have myself been present at similar dissections, conducted by the most experienced demonstrators of our medical school, and with the same result. In the dissection of a female lunatic (a case selected on account of the extreme fury and violence) by Dr. Esquirol, that able pathologist could not detect the slightest mark of disease or change*. Nor is this quoted as a singular result. I therefore cannot help suspecting some error in, or misconception of, Dr. Ellis's remarks to Dr. Graham.

Entertaining a very different view of the condition of the brain of persons insane, and believing that the opinion, that inflammation of its substance is in all cases a concomitant, is likely to lead to dangerous consequences in the medical treatment of insanity, I must be permitted to advise great caution till the doubt be cleared up.

* See Commentaries on Insanity, Part I. on the *Physical Causes*.

Dr. Graham says, also, that "Dr. Ellis has the merit of being the first who combined the moral with the physical treatment for diseases of the mind." Here the mistake is probably the learned lecturer's own; for I have that respect for Dr. Ellis which induces me to think he would never claim a merit to which he is not fully entitled.

Dr. Pinel was the philanthropist to whom the laudable distinction is due, of being the first who recommended the moral means of treating insane persons. The Society of Friends applied this principle as early as the year 1796, when they opened the Retreat at York. It has been acted upon, as far as the means admitted, in that excellent Institution, the Glasgow Asylum, since 1814; and in many other establishments for the insane, both public and private, for many years.

Dr. Ellis will not, I hope, imagine that I intend to disparage his tried and well-known high qualifications for the situation he holds—they are unquestionable. I had an opportunity of witnessing his excellent arrangements and management while he was Director of the County Pauper Lunatic Asylum at Wakefield, and I have embraced every opportunity of adding my humble testimony to his merit.

I am, Gentlemen,

Your obedient servant,

GEO. MANN BURROWS.

59, Gower-street, Feb. 21, 1835.

MR. DERMOTT'S REPLY TO REMARKS
ON HIS "LONDON ANATOMIST."

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,—In your review of my work, *The London Anatomist*, last week, you state that I am in error, because I describe the periosteum to belong to the class of serous membranes, and that the periosteum is fibrous not serous. From this I beg to dissent.

That serous membranes are cellular membrane condensed, was the opinion of the great Haller, and has been that of many other anatomists. We have periosteum, tendons, and ligaments reunited, and bursæ mucosæ formed (nay, even a synovial capsule too, in a false joint, surrounding the head of a dislocated bone) by a condensation of cellular structure. Are we not justified in saying, then, that they are of one family, i. e. that they are different degrees of condensation of cellular membrane? Are not bursæ mucosæ, and synovial capsules, closely allied in structure to the pleuræ and peritoneum?

If we are permitted to class cellular membrane amongst the serous structures (which I should suppose cannot be refused, inasmuch as it universally secretes serum), surely we may include in the same class the periosteum, which secretes serum from its surface, and

forms the external serous surface of the whole of the recent skeleton. If this does not warrant it to be classed with the serous structures, I know not what does.

The loose, flocculent, external surface of the serous membrane shows the true character of the membrane; and the fact of the smooth internal surface not having been unravelled into fibres, physically proves nothing. It neither proves that serous membranes are fibrous, nor that they are not. The serous membrane may be composed of fibres so intimately cohering, and "so closely interwoven as to constitute a smooth continued surface." That tendons and ligaments are inelastic on the one hand, and serous membranes are highly elastic on the other, is no argument that they do not belong to the same family, because you admit that the inelastic tendons and ligaments are condensed cellular membrane, and cellular membrane is highly elastic.

Our brethren, the French, though they far outstrip us in minute anatomical description, are often uselessly fastidious in their distinctions as well as terms, and which we too eagerly embrace*, whereby a strange confusion in our nomenclature is the effect. Nature, I think, does not seem to sanction the distinction between the terms fibrous structures and serous. The term fibrous structure is at best most indefinite, for it necessarily includes muscles, nerves, bones, cartilage, ligament, tendon, cellular membrane, and, probably, synovial capsules, bursæ mucosæ, pleuræ, and peritoneum.

I remain, Gentlemen,

Your obedient servant,

JOHN G. D. DERMOTT.

Theatre of Anatomy, Gerrard-street.
Feb. 24th.

[Mr. Dermott, in his preface to his *London Anatomist*, claimed a reply to the reviewers. We have afforded him the opportunity. When we recommended him to correct the gross error he had fallen into, in designating the *periosteum* a *serous* structure, we did it for the purpose of obviating an error, a great error which his work contained, and which work, we doubted not, would be a test book for students. Mr. Dermott must admit that a *fibrous* structure is not a *serous*. If he does not, why he wars against the system of *General Anatomy*. The structures are as dissimilar as they are opposite in their uses. Were we examiners at the College, we should reject a pupil who did not properly appreciate the distinction. It is so characteristic that the veriest tyro should be accused of ignorance who was not acquainted with the subject.—Eds.]

* The term *fibro-cartilage* is a striking example of this, inasmuch as cartilage is fibrous and ligament is fibrous; how much better the old term *ligamento-cartilagineous* is descriptive of its nature.

Reports of Societies.

ROYAL COLLEGE OF PHYSICIANS.

Monday February 23rd, 1835.

SIR H. HALFORD in the Chair.

An essay, by Dr. Hope, on apoplexy, palsy, and epilepsy, as concomitant with disease of the heart, was read by the registrar.

The paper was rather short, but practical, and abounded with facts, principally drawn from the records of the Marylebone Infirmary. The attention of the medical profession was first directed to disease of the heart as a cause of apoplexy, by the continental writers, more especially Richerand, Bertin, Andral, and others. Few of the English members of the profession have, as yet, thrown any light on the subject, and the communications which have appeared from them have been published solely in the journals, not collected in any monograph specially devoted to the consideration of this malady. The influence of disease in one organ in producing a disordered, and, finally, a diseased, condition in another, is now, we believe, generally admitted and acted upon. Dr. Hope has, in the present instance, endeavoured to point out another link in the great chain which unites organs either by sympathy or reciprocal reaction, in health or in disease. In better hands than those of the Doctor the task could not have been placed, for he is already well and favourably known as a cardiac pathologist.

As the results of the investigations instituted by Dr. Hope, it may be stated that of forty-two cases of apoplexy, palsy, or epilepsy, which terminated fatally in the wards of the Marylebone Infirmary, between the years 1832 and 1834, thirty were accompanied with cardiac disease; in four the heart was reported to be healthy; and in the eight remaining there was no account in the case books of the condition of that viscus. The greatest mortality occurred between forty and fifty, and between seventy and eighty. In the former period, when cardiac disease was present, which it was in the proportion of nine to ten, the affection was located in the muscular structure, to wit, hypertrophy of the left ventricle, in the latter, the disease of the heart was principally ossification; the proportion of cardiac disease at this period was as ten to eleven.

From these premises, the Doctor concludes that disease of the heart is a frequent concomitant of apoplexy, or of its younger sister, (as he terms it) palsy, principally, however, at the periods already mentioned, that is between forty and fifty, and from seventy to eighty. At the other ages when apoplexy occurs, cardiac disease is much less frequently met with.

The practical deductions to be drawn from

these premises are that the heart should be examined in all cases of determination to the head, inasmuch as the plan of treatment usually advantageously adopted to avert apoplexy, when simple or idiopathic, would prove injurious when the complaint is complicated with either hypertrophy or ossification, and at once cause the fit which it is the object to prevent. Active exercise should be avoided as a matter of course when cardiac disease of this nature is present.

After this paper had been read, another, by Dr. Veitch, on the condition of the earth's surface during the invasion of cholera, was brought forwards. There was little novel in the views of the writer of this essay; he seemed very much inclined to attribute the invasion to an hygrometric state of the atmosphere, produced by exhalation from the surface of the earth, as he remarked that the disease principally showed itself, and in its most malignant form, at the estuaries of rivers, and along their course, and in marshy districts, while the high lands were especially free from its attacks. He stated that during the epidemic at Paris, and even while the disease was at its height, the town of Montmorenci, which is situated on a hill, about eight miles from Paris, and overlooks an extensive champaign country, was free, although the neighbouring villages, with one exception, were infected. The exception was the village d'Enghien, which Dr. Veitch considers was protected by the immense quantity of sulphur which is volatilised from its baths, and which is sufficient to impregnate even the ditches. Coupling this fact with the belief of the soldiery, that employing sulphur externally will guard them against intermittents and rheumatic fever, and of the sepoys, that the external application of gunpowder will protect them from the jungle fever, the Doctor is inclined to consider that sulphur may act as a prophylactic against cholera. Negative facts, however, prove nothing unless very numerous, and tried on a most extensive scale. Dr. Veitch therefore advises that large bodies of men, such as garrison troops, &c., be subjected to the plan, which might be put in force by means of a belt containing powdered sulphur, so that the whole system would be speedily impregnated with it.

When the reading of the paper was concluded, Sir H. Halford called on the gentlemen present to furnish communications for the future conversations. He said that the usual plan of proceeding was to submit the communication to the council for its approval ere it was read at the meeting.

There were some fine specimens of the materia medica, the property of Mr. Battley, on the table.

THE

London Medical and Surgical Journal.*Saturday, February 28, 1835.*

REFORM.—OBSERVATIONS ON A SYSTEM OF FEES FOR GENERAL PRACTITIONERS.

As the Parliament, during the present session of which the medical body expects to receive a system of wholesome laws for their regulation, have met; it interests every member of our profession, who has its well-being at heart, to think deeply of the circumstances in which it is placed, and to ponder on the means of extricating it from the pressure of that mass of abuses under which it now totters.

The Government, aided by the voluminous mass of information collected by their Committee at the call of Mr. Warburton, will, we doubt not, lead the van; but it is not, therefore, less imperative on those among us, who can reflect and act, to watch their proceedings; and, if swayed by the jealousy or love of power of certain of our institutions, which are to undergo the process of reformation, they concede too little, or propose a partial and imperfect amount of amendment, to be prepared to remonstrate against such lukewarm proceedings; or, on the other hand, to encourage, if an efficient plan of Reform, and such as we have a right to expect, is brought forward.

That the subject will afford matter of acrimonious dispute cannot be doubted; the interests of two mighty parties, but one far mightier than the other, will be at issue, and appear in the field of contention; the majority will have the public opinion to back it, the minority is at strife with the integrity and spirit of the age. The abettors and conservators of Gothic warts and ancient abuses, assisted by their

corps of corruption, will labour hard, clause by clause, to keep their well feathered nests untouched, and to render the sum total of grace as near to zero as may be practicable, while the long-duped and much enduring class they have unmercifully plucked will, strong in justice and doubly armed, bring the artillery of their wrongs to bear on the rotten but warm fabric of their oppressors' safeholds. Among the latter there will be unanimity, and the cant of privilege and vested rights will be paraded in awful battalia against the forces of reason and justice, but virtue shall overcome depravity, and we predict, that if no grand division infect and enfeeble the camp of the former, that threadbare arguments and skeleton devices shall be borne away by the vigour and substance of truth, like chaff before the wind, leaving her, as trophies of victory, a well won field and a splendid Reform!

Among the several schemes that jostle each other, entertained by different degrees of medical reformers, there is one on which we proceed now to offer a few comments, leaving others to be observed on in future numbers. The plan we allude to, is that of abolishing the general practitioner, and making two orders only, one of pure physician, the other of pure surgeon. Those who would adopt this plan, desire it because they believe that all professors of the healing art should enjoy equal rank, and this they deem inconsistent with the avocation of a general practitioner as now constituted, seeing that he acts in the triple capacity of physician, surgeon, and accoucheur. Now we think, also, that one medical practitioner should not rank above another, unless in so far as merit may effect such elevation, but we go farther and say, that the sum of professional education being made equal in all medical professors, there can be no

just reason why one, who chooses to practice at the same time both medicine and surgery, and even (although certainly desirable that it should not be so) dispenses his own prescriptions, should not enjoy the same consideration and privileges as the *soi disant* pures. We are the more inclined to adopt this opinion from surveying the position in which the public are placed with respect to their medical advisers, the most numerous and useful of whom are decidedly the general practitioners; by abolishing them at once, if such a thing were practicable, a rude dislocation instead of a gradual softening of long cherished prejudices would be attempted; but such a change could not be suddenly effected in a matter which so nearly concerns, and mingles with, the public feeling; it is true, that legislative enactments upon the every day business of life, although running counter to the prejudices of the many, are tolerated, and this the more willingly as they are more remote from disturbing the economy of every one's personal conduct, but begin to coerce a man on those subjects in which habit has taught him to consider himself paramount and unfettered, and you at once rouse that demon of discord and contradiction within his bosom, which although it might not succeed in the attempt, would, nevertheless, most assuredly dare to resist, if not to overturn, the obnoxious power. Now, in no instance, can a legislature interfere with less prospect of success, than in endeavouring to dictate the mode in which individuals shall manage their personal concerns, so far as respects either the health of their souls or bodies; in the former, conscience, a power greater than man can restrain, guides him; in the latter, although perhaps mere opinion may direct, yet it is an opinion, which he will not easily forego, and which is ever

present and in action; it is one which he has imbibed from his youth upwards, and not so likely to give way to an *ex cathedra* condemnation, as to a gradual and almost imperceptible conviction, arising from witnessing the advantages of a better system than he has heretofore followed.

If there be any truth in what we have just stated, it would seem advisable that the legislature should allow the change (if change be contemplated) in the state of the general practitioners to proceed in a great measure from themselves, that so it might become correspondent with the gradual mutation, which, under intelligent laws to be enacted, would, doubtless, sooner or later, affect the public opinion. One of those laws should enable the general practitioner to recover fees for *medical* attendance, according to a certain scale, formed to meet the exigency of the times; the graduation of such a scale could not be an affair of difficulty, if entrusted to practical and competent judges; and if every medical man were, afterwards, to encourage as much as he could the impression, on the mind of his patients, that fees, on a moderate system, were preferable to charges for medicine, and in every instance where it was practicable, were to substitute fees for the same, the first step in the change from surgeon-apothecary into pure surgeon, or pure physician, would be much accelerated.

That there are few medical practitioners who would not prefer being remunerated by fee to sending once a year or so a lengthy commemoration of pills and potions enough to bring back the illness they were administered to cure, we are fully persuaded, the advantages to themselves being much greater in the one case than in the other; their yearly bills, excepting in a very confined number of first rate practices, being of very uncertain

validity, even to the extent of making their losses equal a third or more of the gross amount of credit, besides the unpleasant feeling produced by squabbles and disputes about the quantity of physic sent, or the enormity of charges. The fee system would abolish these disadvantages and vexations, and, moreover, superadd that respectability to the practitioner which ought, by virtue of his education, to belong to him. Moreover, proceeding with the naked truth upon the point of our pen, we assert, without fear of contradiction, that, to the young practitioner commencing business, the fee system, when once generally established, would be a God-send; for how does the case now stand with him?—If he possess but moderate means (generally the fact) in friends and money, he must, following the routine of others in his profession, open a shop at a considerable pecuniary outlay, stocking it with drugs, &c., almost useless in private practice, but absolutely necessary to “make up a show,” and accommodate such customers as the chemist, grocer, and quack have left him. In this shop must he await with due patience and humility the advent of that practice, to qualify himself for which he has already expended much time and means, and which, in too many instances, never comes, or, when it comes, brings not a co-extensive reward; for, be it known, in spite of the vaunted profits some allege to belong to the sale of medicine, a long list of melancholy contradictions, in the shape of failures from giving long credit and unpaid accounts, prove the contrary. The vending medicine is, in fact, in the majority of cases, a losing speculation to the beginner, who, while feeling his way amid the darkness of uncertain returns for services done, and the gloom of deferred hope, too often falls the victim of

disappointment. This the fee system would ameliorate.

Credit is the soul of general practice as now constituted; without being prepared to grant it the practitioner may as well sheath his scalpel, or (must we use a plebeian phrase?) shut up shop, for patients he will have none; and, if he does grant the hungry boon—this credit—he does so at the risk of its being eternal.

The fee system would, in a great degree, do away with this dead weight upon the incipient struggles of medical men to get into practice; credit to the substantial would no doubt still continue to be given, but the classes which now pay worst and expect most would be obliged to put their hands into their pockets more frequently than they are inclined to do under the present system. Labourers, mechanics, and the smaller middle fry, would soon understand it to be more to their profit to give a small ready money fee for advice, and be left to their own discretion in the matter of furnishing themselves with the necessary medicine when and where they pleased, than to incur an uncertain amount of debt depending upon the skill or conscience of their medical attendant. The poorer and working classes, looking keenly after their interests, would be the first to hail and uphold the plan we now propose, and thereby become the supporters instead of the depressers of the young medical aspirant.

We have said thus much upon the subject of fees, from a conviction that were the general practitioner to adopt, whenever practicable, such a mode of remuneration in preference to furnishing medicine, the trading fungus which now luxuriates in rank growth upon our noble science would quickly die, and, like an unhealthy excrescence, be cast away, and finally delivered into more fitting hands.

It may be said, this is a degree of reform which we have the power of accomplishing ourselves without external aid, but, for some reasons or other which it is needless here to explain, the *vis insita* required for the purpose is wanting among our meritorious brethren, and the impulse must therefore come from without. The government must furnish it; and when, among other mighty efforts at advancing the utility of our country's institutions, it lights upon ours, let us, to use an eastern style of expression, keep the eye of intelligence wide open, and the hands of unity ready to act.

COLLEGE OF PHYSICIANS.

THE College of Physicians is still at work, and anxiously extending its consultations, without allowing a particle of their tendency to leak out of the old sieve they have so adroitly handled since the time of their blustering patron, Henry the Eighth. Can any good be intended where so much secrecy is observed? Will the misers quit their hoard, and propose a degree of reform in their antique house which shall be somewhat more than a shadow—a phantom of darkness? Let them be upon the alert; for assuredly even now the ghost of Thomas Linacre looks out of the cloud that envelopes their camp in Pall Mall and frowns denunciation. Let them look to it, we say, and grant their step-children, the Licentiates, and the medical profession in general, a fair field and enlarged privileges, or what they refuse to concede with a good grace shall be wrested from their gripe by the strong hand of compulsion. This is not the age to breed or foster monopolies, and he who runs may read that their downfall is at hand. Let the learning of the Fellows then for once shake hands with worldly wisdom; their erudition combine with com-

mon sense to meet the coming change, for change there shall be, and that speedily.

To our brother reformers we say, when the tide of success has set in, be not afraid of pursuing steadfastly your measures of reform, and when you have succeeded in one point do not hesitate at the sound of your voices, or recoil when viewing the change you have effected, but tread boldly and fearlessly on till all you require is achieved; and, when the victory is won, follow it up closely; and, instead of relaxing into indolence, thinking it enough that the battle is won, reap its fruits.

Foreign Medicine.

Hydrargyria (Erythema Mercurialis).

Read before the Medical Society of Amiens.

BY M. ALEXANDRE, PROFESSOR AT THE
SECONDARY SCHOOL.

M. RAYER, the author of the article *Hydrargyria*, in the "Dictionary of Practical Medicine and Surgery," says, that in the course of twenty years of study, he has only met with three cases of this disease, although he has treated himself, and seen treated by others, a great number of patients, in whom the use of calomel or blue ointment has caused excessive salivation, and although he had attended a great many gilders affected with mercurial tremors. The frequency of hydrargyria in this country, and some peculiarities attending this case, have induced me to bring it before you.

M. F—, thirty-four years of age, of a strong constitution, subject to palpitation of the heart, and having a slight habitual pulmonary catarrh, called me in on the 12th of July, 1833.

The thighs, scrotum, and lower half of the abdomen, are the seat of a purple uniform redness, without efflorescence; the inside of the thighs is greasy and blackish, giving proof that the mercurial ointment has been rubbed in on those parts. The super-umbilical region of the abdomen, the anterior part of the chest, the neck, the face, and the arms, are covered with numerous red and irregular spots, from six to ten lines in diameter, formed by the agglomeration of little papulæ, of from half a line to a line in diameter, slightly prominent, very full, and not containing any fluid. This redness dis-

appears under the pressure of the finger, but returns very intense when that pressure is removed; the skin is very hot, especially of the thighs, scrotum, and abdomen; the epigastrium painful on pressure; the imbibition of liquids causes an unpleasant sensation of weight at the stomach, and sometimes gives rise to nausea; the tongue is very red, and seems to be thicker than usual; it is covered with a thick grey coat; the whole of the mucous membrane of the mouth and pharynx is very red, but there is not any difficulty in swallowing; thirst; pulse indicates fever; the pulmonary catarrh is increased in severity.

The patient informed me, that being desirous of curing a venereal ulceration, which showed itself about four days ago on the glans penis, a few days after coition, as well as a small bubo in the groin, he had the advice of a chemist, and accordingly had recourse to frictions with mercurial ointment on the inside of the thighs; for the last ten days* he had employed it two, three, and four times a day, using each time a piece of the ointment as big as a large bean, and he further stated, that the skin of the thighs became red after the earliest frictions, but that did not prevent his continuing to use the remedy. He had also taken aperient boluses, without mercury, according to the direction of the chemist, and he had Vigo's plaster with mercury covering the bubo. The skin was washed with soap and water to remove the remains of the blue ointment; the patient's linen was changed, he was ordered to abstain from food, and refreshing drinks were prescribed.

13th. The redness of the integuments of the thighs, the scrotum, and the abdomen, continues as intense as ever; the maculæ of the chest, neck, face, and arms, are increased in size; the eruption has extended to the legs and the scalp; the gastric symptoms and the general phenomena are the same as yesterday; urine muddy, depositing a brick-red sediment.

14th. The maculæ continue to enlarge, the papulæ which form it have united together, and are less prominent, in many parts the redness is uniform, without any intervention of sound skin; in others, between the spots there are portions of skin preserving its whiteness; complains of great debility and depression, with insomnia, and very great general heat.—Continue.

* This case is very badly detailed; there is no attention whatever paid to dates. At first we find mention of *four* days previous to M. Alexandre's visit as the date of the chancre; then we hear of the ointment having been employed for *ten* days, *six* days consequently before the patient had his chancre, so that he was treating himself by anticipation for a disease which at that time he had not. Really members of the medical profession, if they wish the cases they publish to be of use, should be a little more attentive to the *facts* they detail.—Eds.

15th. The redness of the thighs and scrotum is rather less intense; a large portion of the epidermis has detached itself from the inside of the thighs, the skin of the abdomen, from the pubes to above the umbilicus, has returned to its normal condition; with the exception of the arms and legs, where the primitive form, in spots, continues, all the rest of the skin is affected with an uninterrupted redness, of a violet colour at the back, nates, and most depending parts; pressure does not efface the redness on those parts, but it does so on the anterior surface of the body. The heat is much greater, burning, with occasional itching; the gastric symptoms are more marked; pulse rather weak, 116; oppression, agitation, inquietude. Venesection. M. Barbier was now called into consultation. An opiate, containing thirty-six drops of laudanum in a four ounce mixture, was ordered, a spoonful to be taken every two hours.

16th. The integuments of the abdomen have resumed their redness, and the epidermis is separating; the thighs are rather more red, the new cuticle is also being detached, but in small scales; the eruption is losing its primitive form on the arms, legs, face, and scalp, the spots becoming enlarged, and the papulæ effaced; pulse, 100. In the evening the fever increased, with agitation, depression, and insomnia.

From the 16th to the 20th the disease remained much in the same state.

21th. The desquamation has gradually ceased on the thighs and abdomen, and their skin has nearly resumed its natural colour, is softer, and rather moist; the skin becomes redder at night, and the heat is very inconveniently increased, with fever.

26th. The skin of the thorax has become normal; it is white, soft, and free from desquamation; that of the face, scalp, arms, and legs, is still desquamating in small scales; the back of the hands is furrowed with deep, transverse fissures, corresponding with the folds on the back of the phalangeal joints.

28th. The integuments of the fore-arms, hands, legs, feet, and scalp, are dry, and still desquamating; in the other parts of the body it is normal; the eyes are almost well; the pulmonary catarrh has returned to its usual condition; the appetite continues to improve, and digestion is properly performed; the mind is still depressed, and the insomnia persist.—*Journal Hebdomadaire et Gazette des Hôpitaux.*

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

CASE I.—*Strangulated Hernia — operation early.*—Charlotte Kitter, ætat. 34, admitted Feb. 19th, 1834. Catamenia present. Has had femoral hernia for some years, reducible till 10 o'clock, A. M., after which attempts were made to reduce it without success, and in

the evening she was sent to the hospital. There was a femoral hernia of some size, turning over Poupart's ligament, very hard and firm at the ring, and the tumour itself tender and painful. The chief circumstance, Mr. Hawkins said, in his opinion, to be attended to in strangulated hernia, is the state of that part of the protruded bowel or omentum which is *embraced by the sac*, for if that portion is very hard and tender, it is not very likely to be reduced, and the part below may be quite flaccid and unattended with pain, although mortification may be going on; a portion of tightly strangulated bowel being defended by omentum or by a quantity of fluid in the sac below the ring. For this reason Mr. Hawkins thought it right in this case to proceed at once to the operation, without further trials to reduce it, which was done about twelve hours after the strangulation. The sac contained about five inches of intestine, which was dark coloured, but quickly recovered its proper circulation when the stricture was divided, which was very broad and tight. After the bowel was returned, a large quantity of serous fluid came down from the abdomen. She was then left quiet for the night.

20th. An injection was given, and afterwards three doses of Epsom salts and infusion of roses, and the bowels still continuing confined three grains of calomel, followed by some castor oil, were also given. In the evening the bowels had been freely open, and no pain whatever was felt.

22nd. Beef-tea was given, and the next day fish, the patient not having had a single bad symptom. On dressing the wound it was found to have almost united by the first intention. A small portion of skin, however, near the incision, looked as if it was going to slough from the force used in the taxis, which did actually take place. The patient however quickly got well.

CASE II.—*Rupture of Intestine by a Blow upon a Hernia.*—The records of forensic medicine possess more than one such case as the following, and show the danger of leaving a hernia unreduced, and unprotected by a truss, however common such carelessness unfortunately is in all classes of life.

Henry French, æt. 55, admitted Jan. 11th, 1834, under the care of Mr. Hawkins. This man had been leading a horse drawing a cart, when the animal took fright, and ran against some iron railings, by which means he was squeezed between the railings and the wheel. He had slight scalp-wounds in one or two places, and a severe contusion of one arm; but what he chiefly complained of was, severe pain in the abdomen, especially on the right side, where there was an inguinal hernia, that he thinks was down at the time of the injury, and which came down also several times after his admission. There was no great anxiety or collapse when first seen, the pulse was 84, full and soft. Leeches were applied to the

part, and saline and antimonial medicine ordered. The next day he seemed pretty comfortable, and said he was relieved by the leeches, though there was still some tenderness. Leeches repeated, with aperient medicine, as the bowels were not open. Pulse 90 and small. In the evening he felt better, though some distension of the bowels was perceived. Between 12 and 1 o'clock the house surgeon was called up to him, and found him in very great pain over the whole abdomen, with exquisite tenderness on the least pressure; constant retching; much distension of the abdomen; the skin cold, and the pulse hardly perceptible; in short, the most acute peritonitis had evidently come on. He continued much in the same state till about 3, when he aroused himself, and asked for some warm gruel to drink, but before the nurse could procure it he had fallen back and expired, about forty hours after the injury.

On examination the next day, nothing was found in the hernial sac, but in the right iliac fossa a portion of small intestine was seen in a cavity formed by adhesion from recent lymph, and enclosing a quantity of lymph and pus and a little faecal matter. The bowel was slightly ecchymosed, and a small rupture of its coats was seen about one-third of an inch in length. The whole peritoneum was inflamed and coated with lymph.

The hernial sac presented a curious complication, that in an operation might have caused some difficulty. Below the sac was a hydrocele, and behind the sac a large varicocele, and in front of it was a fatty tumour about two inches and a half long, and surrounded by a smooth cyst, in which it lay loose like a portion of omentum in a hernial sac; so much so indeed, that it was thought at first there must have been a double hernia.

CASE III.—*Operation twice performed—Mortification of Bowel—Severe Symptoms by separation of Slough. (?)*—James Wheatley, æt. 46, admitted July 21st, 1831, with strangulated hernia, for which he had worn a truss since he had been operated on by Mr. Hawkins for the same hernia, about a year ago; but he had allowed the rupture to come down occasionally, and it had not gone up again since Monday (three days ago), when, after some exertion, following a hearty meal of potatoes, a large portion of bowel had descended. Vomiting came on two hours afterwards, and had continued till the present time, and hiccup yesterday.

He complains now of violent griping pains in the abdomen, constant retching and vomiting of stercoraceous matter, with occasional hiccup. Abdomen tender around the hernia, and still more in the epigastrium, which is the chief seat of his pain; no motion since Monday; countenance anxious; pulse 76.

He at first refused to have the operation performed, but submitted in the afternoon; after ice had been applied for some time;

Mr. Hawkins performed the operation with some care, in consequence of the former operation, and found the intestine in contact with the fascia, the peritoneal sac having been obliterated in front by the previous incision, so that, in the lower part of the sac the bowel was closely adherent to the common integument. The intestine consisted of about five inches of the smaller bowel; it was of a bright red colour, from inflammation, and thickly coated with recent lymph, and, upon separating the adhesions, a spot, of the size of a shilling, was seen to be quite black, looking like coagulated blood, and without any glossiness, and the coat of the bowel very thin. After a little consideration, Mr. Hawkins returned it into the abdomen, observing that the mortification of so small a portion could often be effected within the abdomen, so that the slough separated into the canal, and a better line was presented than if the surgeon was to open the bowel and leave an artificial anus; and that, if the requisite adhesions did not take place for this object, still it was generally found that the mortified spot remained at the internal ring, and, consequently, that the fæces did not necessarily become extravasated into the abdomen, but could very often come away by the wound. The case demanding great attention, however, about the period when the slough would probably separate.

The vomiting, and hiccup, and pain continued after the operation, and, about four hours afterwards, twenty leeches were applied (fomentations not appearing to give any relief), and the following mixture—

R. Magn. sulph. \mathfrak{z} ss. Acid. sulph. dil. \mathfrak{ij} v. Aq. menth. viridis, \mathfrak{z} ss.—
M. fiat haust. 2dis horis sumend.

26th. 8 A. M.—Tongue more dry; pulse 86, weaker; bowels just opened twice, the evacuations being very dark and fœtid.

One P. M.—All pain and tenderness gone; hiccup continues; pulse very low. Allowed beef-tea and arrow-root in small quantities. Ordered to continue the draught, and in the evening to have an injection of gruel, and to take some pills, with calomel gr. \mathfrak{ij} . and pil. sapon. c. opio, gr. v.

23rd. More comfortable; pulse a little stronger; bowels not at all free.—Cont. haust.

24th. Tongue clean and moist; no pain or tenderness; complains only of hunger, but Mr. Hawkins allowed no solid food.

25th. Wound dressed, and found almost wholly united by the first intention.

27th. Some heat of skin; bowels very little open; complains of griping pain.

Appl. fofus papav. Cont. haust.

29th. (8th day.) Quite comfortable till this morning about one o'clock, when he was attacked suddenly with violent pain and tenderness in the abdomen; constant vomiting, which soon became stercoraceous; tongue

dry; pulse very small and rapid; great flatulence complained of.

An injection was given, which brought away no fæces. His mixture was repeated every two hours, and the abdomen fomented, without relief.

10 A. M.—Symptoms increasing.

Applic. hirud. xxv. abdomini.

1 P. M.—Mr. Hawkins saw him, and found the symptoms not relieved by the leeches. Abdomen quite tympanitic; very anxious.—
V. S. ad \mathfrak{z} xij.

R. Calomel, gr. v. Opii, gr. j.—M. statim.

R. Aq. menth. pip. \mathfrak{z} jss. Sodæ tart. \mathfrak{z} iij. Magn. \mathfrak{z} ss.—M. 2dis horis donec alvus respond.

6 P. M.—Calomel, gr. v.

10 P. M.—Pain lessened considerably; has just had a copious motion; the retching and hiccup continue; pulse small and fluttering; extremities cold; surface of body bathed in cold perspiration.

Applic. empl. Iyttæ magn. abdom.

R. Calomel, gr. iij. Opii, gr. ij. stat.

30th. Has a good deal rallied. The extremities began to get warm soon after the application of the blister; skin now moist and warm; vomiting; pain and tenderness ceased; bowels discharging chiefly secretions without fæces.

Cont. haust. aper. salin.

Rep. pil. vesp.

31st. Rep. pil. et haust.

Aug. 2nd. Has very much improved, but has had several returns of vomiting and pain to a slight extent; bowels not free.

R. Pil. hydrarg. gr. iv. Pil. sapon. cum opio, gr. iij. Extr. coloc. comp. gr. v. M. o. n. s.

R. Ol. ricini, \mathfrak{z} ss. mane sequente.—Beef-tea, &c.

5th. Was again attacked this morning with vomiting and griping, without pain.

R. Calomel gr. iij. P. opii, gr. j.—M. statim.

Enema terebinth.

One P. M.—Vomits stercoraceous matter; tongue dry; hiccup; not much pain.

Rep. pil. cal. et opii, statim et h. s.

Vespere.—Symptoms continue; extremities cold.

Vini albi, \mathfrak{z} ij. Calomel gr. iij c. p. scam. gr. ij. statim.

Olei ricini, \mathfrak{z} ss. mane.

6th. Vomiting continues. Evacuations not fecal for some time; surface still cold.

Vini, \mathfrak{z} iv. Ova.

Empl. Iyttæ abdom., et postea ung. hydrg.

7th. Beginning to rally a little; vomiting continues.—Burnt brandy, \mathfrak{z} iv.

9th. Going on well. Continues his wine and brandy, and allowed also some porter.

13th. Going on well to-day, when some griping returned, with vomiting, and again on

the 20th, at which time the abdomen was very much swollen and tympanitic.

It is unnecessary, however, to detail the rest of the case, as it went on nearly in the same way for some time longer, before he was finally cured, during which time the treatment of the case was nearly the same—supporting the general strength, while the action of the bowels was restored by calomel and opium, and purgatives, &c.

Mr. Hawkins attributed the symptoms to the separation of a slough from the bowel, by which inflammation was produced, with a great deal of irritation and disturbance of the functions of the bowels, from the consequent narrowing of the canal of that part.

WESTMINSTER HOSPITAL.

Cancer.

THERE is, perhaps, scarcely any disease within the domain of surgery so painful and so certainly fatal, if left to itself, as cancer. Palliatives or medicinal treatment prove unavailing, and the knife of the operator is far from being always successful. Its progress is slow, but, unfortunately, too sure.

The predisposing cause of cancer has not yet been ascertained; and it would be an useless waste of time to allude to the different theories which have been brought forward. In some cases it is said to be hereditary. Napoleon Buonaparte is considered to have perished in consequence of an hereditary cancer of the stomach, his father having died of the same complaint at the early age of forty.

Cancer may affect the skin, the mamma in the female, and, occasionally, in the male, the testes, scrotum, uterus and its appendages, rectum, penis, stomach, œsophagus, lips, tongue, and the pharynx; the nose, eye, lachrymal gland, palpebræ, and the bones, with various other structures, have been the seat of scirrhous.

Cancer of the breast generally shows itself by a small, hard, and indolent tumour, which may have existed for some time previous to its discovery, as it causes, in general, no inconvenience or pain to the patient. In this state it is called *occult cancer*, or scirrhous tumour of the mamma. Some accidental cause arises, as, for instance, a blow, or some other injury inflicted on the part, and the tumour is then perceived, because attention is directed to the breasts, and also because the accident, by causing irritation, tends to develop the malady more rapidly, and to bring it into activity. In consequence, a tumour which had been stationary for years, and might have continued so for an equal or greater length of time, is rendered active, or, caused to put on its malignant character, increases rapidly in size, becomes of a stony hardness, and the seat of lancinating pains, darting into all the vicinal parts, and the integuments assume a leaden aspect, and are freely marked with large blue

and tortuous veins (whence its name, *cancer*), and the nipple is retracted. As time advances the disease forms adhesions with the surrounding parts, which, in their turn, become vitiated, long processes of cancerous structure passing deeply into the cellular tissue, taking root as it were. While this is taking place, the patient's health suffers materially, the countenance takes on an anxious appearance, and becomes of that leaden colour which is the general characteristic of malignant disease. Rest is disturbed and finally broken by extremity of pain; the appetite fails, and the bodily powers are evidently giving way under the infliction, and all or many of the functions are performed irregularly. The pain becomes more and more intense; the integuments inflame, thin, and crack in several places, giving passage to a sanious or sanguinolent foetid discharge. The cracks enlarge and unite together, forming an ulcer with rough, jagged, overhanging edges, and irregular elevations and depressions in the cavity itself. This constitutes what is called the *open cancer*.

Other parts of the body become similarly affected, either at the period when the scirrhous ulcerates, or soon after, sometimes even a little antecedent. The chain of glands along the upper and lower margins of the pectoralis major, leading to the axillary knot of absorbents, become enlarged and scirrhous, and finally those in the axilla. The uterus may also, as it is a great sympathiser with the breast and does occasionally participate in the disease, take on the scirrhous structure, and ulcerate, forming of itself one of the most painful maladies to which a female can be subject.

An open cancer is an ulcer of such a peculiar appearance, that it may be, generally speaking, very easily recognised. It is irregular in shape, and also in its general aspect; the edges of the ulceration are rough, ragged, and inverted, hanging over deep hollows and irregularities formed by large, unhealthy, flabby granulations, if such they may be called, situated at varying intervals. The whole surface is plentifully bedewed with a sanguinolent sanies, exhaling a most foetid odour. The pain becomes more and more acute, the ulceration continues to spread, and may even affect the ribs or the sternum beneath. In this condition it seems some women may live for years miserable objects; but whether it were better to die than to exist under such intensity of suffering can hardly be a matter of doubt. The patient, however, most commonly sinks at the end of a few months, exhausted by pain and the other drains on the constitution.

The treatment of cancer divides itself into palliative and operative, for the latter, in by far the majority of cases, does not merit the name of radical.

The palliative is the only plan that can or ought to be adopted in the advanced stage of the disease, when the cancer has ulcerated, or when the axillary or pectoral glands are involved in the change of structure. A very

gloomy prognosis must of necessity be formed in such a case relative to the probable success of an operation; perhaps there is not an instance on record where it proved ultimately successful. The treatment, therefore, would mainly consist in the exhibition of anodynes, &c., so as to alleviate pain, the averting of all causes of irritation, and treating symptoms as they arise. Such a case is undoubtedly without the pale of surgery; but still it is a great advantage to be enabled to disarm the king of terrors, and to lay smooth the passage to the grave.

The latter, or the operative plan, again, may be divided into that in which pressure is employed, or where caustic is used, and that in which recourse is had to the knife, but the general ill success of these methods induced several members of the profession to seek for a medicinal agent which might effect a cure. It is much to be feared that hitherto their efforts have been fruitless. The celebrated Stoerck of Vienna introduced several narcotics into practice, as almost specifics for cancer. He confined his representations of beneficial agency in effecting a cure to the occult stages, considering them, however, as palliative in the more advanced condition of the breast. It may therefore be justly concluded, more especially as his remedies have failed in the hands of others, that Stoerck mistook cases of simple tumour, or enlargement of the mammary gland, for carcinoma. There is nothing improbable in this supposition, for some of the most celebrated and talented surgeons have committed similar errors. Of the narcotics which he employed, the Aconitum Napellus was most used, a remedy which still possesses a very high reputation in Germany. The whole of them enjoyed a high degree of ephemeral fame, but which was soon lost, as it was found that they did not fulfil the high promises of their learned discoverer. It has been alleged, that the cause of failure may be found in the wrong species of plant being used, or to the preparations being carelessly made. Probably the subject is worthy of further investigation. Iodine has of late been recommended, but without advantage.

Another plan, which was some time ago in great vogue, was the employment of pressure. This was the invention or discovery of a surgeon of the name of Young, who was so enthusiastic in its praise, as to found or cause to be founded a cancer dispensary, where he gave his plan a fair and free trial. It consisted in the application of strips of an unirritating plaster over the whole breast, and that as tightly as could be borne. This was continued and re-applied. At the end of a fortnight or three weeks some diminution would be evident: this was more apparent at the end of six weeks or two months, when the patient and the surgeon would be buoyed up with the hope of a speedy and certain cure being effected; but, on a more strict and close examination being instituted, it was found that the pressure had caused the absorp-

tion of every particle of fat in the surrounding cellular tissue, but had left the tumour as it was. Consequently this plan was necessarily abandoned.

Surgeons have always been, and perhaps always will be, much divided as to the origin of cancer; whether it be constitutional or local, a question of considerable importance, as on it depends the propriety or impropriety of extirpation in the early stage. It is probable that the disease is both local and constitutional, that is to say, local in the onset, and constitutional as the disease advances; though, perhaps, some cases may happen in which it may be constitutional *ab initio*. The majority of surgeons now act on the principles which guided Mr. White in the advice he gave (see the case of Mary Meek). It is not wise, neither is it necessary, to meddle with an indolent scirrhus; an operation may, by the excitement it causes, be the means of rousing the dormant mischief in the system, should it prove a constitutional affection; even merely handling the tumour rather frequently may precipitate its termination into the open cancer. But when the occult malady shows signs of activity, when the integuments become inflamed, or when commencing ulceration is evident, it would be highly advisable to proceed at once to its extirpation, ere the chain of glands becomes affected, ere there is much ulceration or constitutional disturbance. Without it, the patient is sure to die a lingering and painful death; the operation affords a chance for safety. No surgeon would do his duty unless he explained such circumstance to his patient, and also the risk: there is of a relapse, then let her decide for herself.

Supposing, now, that the operation has been performed, and the patient has recovered from its effects; she may either live for many years, and at last die of another complaint, or the disease may return within a longer or a shorter period, and destroy life. It has been known to re-appear in the cicatrix itself, ere it was formed. The cancer thus reproduced has been extirpated, but of course unavailingly. The majority of surgeons are against and reprobate the performance of such an operation, as the relapse proves the disease to be constitutional, and not to be eradicated by surgical means, and consequently a second operation is merely inflicting additional suffering, without any real prospect of advantage.

The usual time, when a relapse of the cancer is expected to take place, should it occur, is about a twelvemonth after the operation, from that to two or three years, but even after the lapse of ten years it has again showed itself, and occasionally it has been known to occur, as has been already stated, ere the cicatrix had been formed. When a relapse has occurred, the scirrhus becomes ulcerated much more speedily than in the original complaint. Instead, however, of appearing in the same situation, the disease may occasionally attack other parts of the body;

the other breast, for instance, or the uterus, but in neither case can any thing be done in the way of a cure. The palliative plan of treatment is alone feasible, and alone to be adopted; the patient is, we may say always, doomed, surgery can do nothing for her.

On laying open a cancer, after it has been excised, it presents the following appearances: the structure is laminated, crossed by transverse ligamentous bands, or what appear to be such; in the centre there is generally a softish pulp, while all around is firm; the cellular tissue in the neighbourhood is generally diseased, and occasionally there are radicles striking into the adjacent parts, the whole of which must be removed, or the operation will be infructuous. When the disease is more advanced, and before it has proceeded to the stage of external ulceration, the softened pulp in the centre has disappeared, and its place is filled up by that sanies, which is afterwards abundantly secreted from the surface of an open cancer. The vicinal chain of glands, when enlarged, partake more or less of the same structure as the disease of the breast, and some of those, which are more mature, may contain sanies. In extirpating these, when an operation is performed under such unfavourable circumstances, it is not enough to cut out the glands themselves, but their connexion with the mammary tumour must also be removed, or a relapse will assuredly take place, and the operation prove of no advantage to the sufferer. The extent of incision would be frightful, and the chances of ultimate safety are so poor, that perhaps after all it were better to let it alone.

CASE I.—Cancer of the Right Mamma.—Sarah Tuck, ætat. 47, was admitted July 23rd into Anne's Ward, under Mr. Guthrie, for cancer of the right breast. She is a short and very fat woman, of the leuco-phlegmatic temperament, and so much alarmed at the idea of an operation, that Mr. Guthrie remarked, that if it were not done within half an hour after her admission, she would run away from the hospital to avoid it. She is a servant at the University of Cambridge, married, and has borne a child. The menses are regular.

The disease commenced about eight months ago, and the tumour, at the date of her admission, possessed the characteristic hardness, with retracted nipple, and lancinating pain. The axillary glands were enlarged.

Mr. Guthrie removed the breast, including the nipple, with a double elliptical incision, made rather obliquely; this having been effected, the glands in the axilla were cut out, and several portions of fat, which presented an unhealthy, or suspicious, appearance; the pectoralis major was bared, and part of it cut away with the disease; one or two vessels were then tied, and the ligatures cut short; a central one was then passed through the integuments, to keep the labia of the wound in apposition; large straps of adhesive plaster

were then applied; pressure with the hands, duly and regularly sustained, was directed to be exerted on the parts for four hours, with the view of preventing secondary hæmorrhage. Mr. G. observed, that where this was properly done he had never known any ulterior bleeding occur. The plan proved ineffectual, however, in the present instance; on the second day after the operation slight hæmorrhage occurred, and again, on the 27th, blood was lost to the amount of half a pint; on both occasions it stopped spontaneously. Hysterical symptoms supervened soon after the operation, and were removed with great difficulty. She survived about a week, but did not rally. On examining the breasts, no attempts at healing appear to have been made by nature.

The friends would not permit the body to be opened.

CASE II.—Cancer of the Right Mamma.—Mary Meek, ætat. 47, attended at the hospital August 24, 1833, by desire of Mr. Lynn, sen., for a consultation to be held on her case. She is a tall and rather stout woman, of the leuco-phlegmatic temperament. The following statement was elicited during the consultation by her answers. [The consultation was held in the first instance between Mr. Lynn and Sir A. Carlisle in the theatre, and, afterwards, between Mr. Lynn and Mr. White in the shop.]

She resides at Clapham; is a nervous, irritable woman as regards her system; has been married twenty-two years, but has not had any children. Rather more than two years ago, she received a blow on the right breast from a door suddenly slammed to, the key, which was in the lock, striking her on that part. A tumour shortly afterwards formed, which remained nearly stationary until within the last two months, since when it has rapidly increased in size. She has been under the hands of an apothecary in her neighbourhood, by whom she was lately sent to Mr. Lynn, with an assurance that an operation afforded the only chance, and that but a poor one. Mr. Lynn expressed himself of the same opinion, but was willing to give her the chance, and, with that intent, directed her to come to the hospital for the consultation.

On examination there was found to be a tumour in the right breast, rather larger than the fist, unattached, save to the integuments, of a stony hardness, and sensible to the touch; veins in the neighbourhood enlarged and partly varicose; skin of a leaden hue, save near the nipple, where it is ulcerated and inflamed; nipple retracted; she complains of lancinating pain in the breast; glands in the axilla not enlarged, nor is there any other apparent affection of the system; the uterus and other viscera do not present any indications of disease. She menstruates regularly, and says she enjoys good health.

The history of the case having been thus obtained, she was directed to withdraw, when

Sir A. Carlisle expressed himself as unfavourable to an operation. He remarked that he had never known a case terminate favourably after an operation had been performed; the disease had always returned, and terminated the life of the sufferer. He had known patients live ten years with a cancer; he instanced the case of Mrs. Gordon, who had been one of the incurables in that hospital for two and thirty years, with five cancerous sores, and at last died of old age. Hæmorrhage, he remarked, took place occasionally from the surface of the sores, and then the pain abated. He finally expressed it as his opinion that all operations, and more especially those on the breast, in irritable subjects, like the woman whose case was under consideration, were likely to terminate unfavourably. With this opinion Mr. Lynn appeared to coincide, and it was finally arranged that the palliative treatment alone should be had recourse to, unless the woman herself became exceedingly anxious to be freed from her burden, in which case she should be admitted into the hospital and an operation done. In this intent she was provided with half-a-dozen of Mr. Lynn's pills, to take one or two occasionally.

Just as the woman was on the point of leaving the hospital, Mr. White arrived, and having been informed of the nature of the case, became anxious to see it. Accordingly Mr. Lynn led the way to the shop, where a second consultation was held. The preceding statement having been recapitulated, and Mr. White having examined the breast, and satisfied himself as to the nature and present condition of the scirrhus, the woman was desired to leave the dispensary, and then Mr. White gave his opinion. He considered the case to be fit and proper for an operation, because the rapid growth of the tumour was recent, it was not adherent, and there was not any disease in the neighbourhood, her general health likewise was good; an additional and forcible reason was that the disease was putting on its most malignant aspect. He would not amputate a breast if the tumour were quiescent, because it might remain so for some time, but as soon as it became irritable, and inclined to ulcerate, as was evidently the case in the present instance, the sooner the operation was performed, the greater was the chance for the patient; he was of opinion that it would prolong her life, and keep her quiet a longer time.

These different opinions were communicated to the woman, and she was informed that, if she made up her mind for an operation, she would be admitted into the hospital.

Nothing more was heard of her until Sept. 14th, in the same year, when, having finally decided on submitting to amputation, she was admitted under Mr. Lynn, and forthwith brought into the theatre. Mr. L. removed the breast by a double elliptical incision, including between the two cuts the whole of the tumour and the nipple. As the operation

proceeded, Mr. White, who assisted him, placed his fingers on the orifices of the bleeding vessels, which were not tied until the tumour was completely removed. Three ligatures were applied; the cellular tissue was so far excised, that the pectoral muscle was laid bare. The patient displayed great courage during the operation, but required a little wine towards the latter end. The lips of the wound were drawn together with strips of adhesive plaster, and the patient was put to bed.

15th. Passed a tolerable night, and is nearly free from pain; complains that the bandage feels rather tight, which she considers gives rise to a similar sensation of tightness in the chest. There is not much action in the system; pulse small, but not feeble; complains of slight pains in the loins; bowels not open; had a saline draught this morning. Wishes for fish for dinner, which was ordered for her.

17th. Is much the same, with very slight reaction; the pulse is very small, and scarcely to be felt; does not rest well, and is very nervous, dreading the pain of dressing the wound; she experienced but little, however, as the bandage was cut, and the dressings softened and well soaked with warm water, before they were removed. Adhesions were found to have taken place in part, while suppuration was forming in the centre; bowels open; appetite little.

23rd. She is now taking ammonia with gentian and aromatic confection; suppuration moderate; the ligatures have separated to day, the 16th after the operation.

25th. Has four ounces of wine daily at her own request; has a mercurial sore mouth, caused by one of Lynn's pills which she has taken.

28th. Doing well; wound healing; mouth still sore. Is very anxious to leave the hospital; recommended to stay a little longer, more especially on account of her sore mouth, but she refused.

She came afterwards once or twice to the hospital to show herself; the wound was quite cicatrised, and there were then no symptoms of a return of her complaints. About two or three months ago, however, we learnt from a surgeon who was attending her at Mitcham, where she then was, that the disease had returned in other parts, and she was then dying. We have not seen the gentleman since to ascertain the termination of the case, but little doubt can be entertained as to the fatal result.

CASE III.—*Ulcerated Cancer of the Right Mamma—Death.*—Emma Hollingsworth, ætat. 49, residing in Little Marylebone-street, was admitted into Anne's Ward, Oct. 15th, 1833, under Sir A. Carlisle. Is a tall and rather thin woman, of the atrabilious temperament; is a widow; has been married nineteen years, but has never borne children; six years ago the change of life occurred, marked by occasional floodings, and sometimes by complete absence of the menstrual

secretion for months. About twelve months after her dodging time had commenced, she was admitted into the Westminster Hospital with rheumatic fever, and she says that during her convalescence she perceived a small tumour form in the right breast, moveable, and without pain, but "as hard as a marble." It increased in size very slowly for the first two or three years, and during that time she remained free from pain. Two years ago she became the subject of lancinating pain in the tumour, which began then to increase much more rapidly. A twelvemonth past she had some leeches applied, with the hope of relieving the pain; the bites did not heal, and in a short time an open cancer was established.

On her admission, she presented a tumour of the right mamma, about the size of the fist, of stony hardness, with retracted nipple, enlarged and varicose veins, and the integuments altered in colour, adhering to the diseased gland, which appeared to be unattached to any of the subjacent tissues. There were several clefts in the integuments covering the tumour from which issued a sanious fetid discharge; there was also an irregular ulceration, of the size of a crown piece, also bedewed with the cancerous ichor. It was considered that some of the axillary glands were enlarged, but this was not ascertained to the satisfaction of all who examined her. The chain of glands running along the upper and lower margins of the pectoralis major were apparently normal.

Her general health is much affected; she is much emaciated; appetite failing and rest broken; there was not any symptom of any other disease being present in the constitution.

She was admitted into the hospital principally because she had been a servant of Sir A. Carlisle's, under whose care she was placed. She was resolutely determined that no operation should be performed, but was willing to try the effects of any remedy that could be proposed. It would be useless to trace the diurnal progress of the case. Soon after her admission, iodine was employed, both externally and internally; and the ioduretum ferri was given, but without any benefit. While she was taking these medicines, the ulceration enlarged, the discharge increased in quantity, and became more and more fetid, the tumour became adherent to the surrounding parts, the axillary glands evidently participated in the disease, and her life was one continued scene of misery. Mr. White's attention was drawn to the case about this time, and he recommended the free application of the potassa fusa, so as to destroy all the fungoid and unhealthy parts; this was done three or four times with the effect, as he prognosticated, of rendering the ulceration clear and apparently healthy, of altering the nature of the secretion, and of alleviating or nearly removing the pain for a time. Its effects were,

however, merely local; the constitutional symptoms were becoming almost daily more severe and threatening; the countenance constantly wore an anxious and depressed look; rest could only be obtained by the use of morphia; her appetite was lost, and she was wasting to a shadow, in fact, the tenure of existence seemed held only by a thread, when, early in September last, she was attacked with erysipelas, followed by profuse suppuration, from the immediate effects of which she recovered, but the extreme debility induced by it, and the long and painful continuance of her cancer, remained, and she sunk on the 18th of November, 1834. The body was not examined.

To these cases may be added one of carcinomatous tubercle of the face, although it does not seem to be in exact relation with the preceding.

James Bryant, ætat. 51, residing at Bracknell, in Berkshire, was admitted into Mark's Ward, under Mr. White, Dec. 8th, 1832. About twelve months previous he perceived a small pimple on the left side of the nose, which became ulcerated, gradually enlarging until it was as large as a sixpence. When admitted it gave him little pain, but that was decidedly lancinating. The ulcer had hard, and rather everted edges, with irregular depressions and elevations in its cavity, without any indications of granulating, presenting, Mr. White said, the appearances of the carcinomatous tubercle. His general health was unaffected.

While the man remained in the hospital, Mr. White made a few remarks on the case, which may be here introduced. He observed that the disease was more analogous to the tubercular fungoid tumour of the breast, in young females between twenty and thirty, than to true cancer; he added that on the face and lip, destructive agents and excision would prove more permanently successful than in other parts; nevertheless, he had seen the glands in the neighbourhood enlarged, and containing that peculiar matter which indicated its origin from the parent stock (cancer).

Within a day or two after his admission, a consultation was held relative to the performance of an operation, which was deemed impracticable, on account of the situation of the ulcer, which covered the lachrymal sac, extending up close to the tendon of the orbicularis palpebrarum, and it was feared that the latter would be injured in excising the disease. The nitras argenti was accordingly applied in substance, a very fine point being applied occasionally on the surface. The first effect was to remove the hard and everted edges; contraction and cicatrisation afterwards took place, the lower part of the ulcer healing before the upper. He was discharged well, on the 29th of Jan., with directions to return should a relapse occur. Upwards of a year and a half has passed, and no tidings have been received of him.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, Feb. 19, 1835:—Alfred John Spencer, Belper, Derbyshire; Joshua Ingham Ikin, Moer Allerton, near Leeds; Griffith Davies, Dolgelly; Thomas Henly King, Calne, Wilts; Francis Hales Skurray, —; Jas. Eckley Pattison, Taunton, Somersetshire; Frederick Collins Noble, Knowlesworth; George Broad, Penzance.

MISCELLANY OF FACTS.

Will of Baron Dupuytren, relative to the new Chair of Pathological Anatomy at the Paris School of Medicine.—Orfila has sent a letter to one of the French daily papers, in consequence of an article on Dupuytren which had appeared in it, and in which he was alluded to. Some errors had crept into the article in question, which M. Orfila desired to be set right. He says that on the 24th October, Dupuytren, in the presence of M. and Madame de Beaumont, requested his advice relative to that clause in his will by which he bequeathed 200,000 francs to the School of Medicine, with the view of founding a chair of pathological anatomy, and also stated his wish that Cruveilhier should be the first professor. Orfila suggested that the sum should be devoted to the formation of a museum of morbid anatomy, to be called the Musée Dupuytren, as well as the chair. This proposition met with the approbation of Dupuytren, and also of Cruveilhier, to whom it was afterwards submitted. It should seem by some remarks made afterwards by the testator, that he so thoroughly adopted the proposition for the museum, as to be desirous that his nephew should hold an office in it; yet by some extraordinary and unaccountable accident, the original provisions in the will, directing the foundation of a professorship only, were not altered, and consequently the museum is out of the question.

Anatomy—Scarcity of Subjects.—A meeting of the medical students at Edinburgh took place on Saturday week, in the Waterloo Rooms, for the purpose of taking steps to obtain a better supply of subjects for dissection. It should appear that the parochial authorities have in some instances thrown obstacles in the way of the students, which are only to be explained by the supposition of the existence of the most narrow-minded prejudice that ever beset mortal man. The substance of the resolutions which we append will show that the complaints of the Edinburgh students are identical with those which have been just redressed in London. We do not doubt but that they will be equally attended to. The pupils intend petitioning parliament, and also memorialising the Secretary of State on the subject. The resolutions were to the effect, that the Anatomy Act is defective, inasmuch as it does not render it imperative upon parochial authorities, managers of hospitals, &c., to deliver up their unclaimed dead, and that consequently many are buried which might be rendered available to the student of anatomy, without prejudice to the feelings of any, while at the same time it would obviate the complaints, that the few which they at present receive are unequally distributed among the different medical schools.

APPOINTMENTS.

Naval.—Mr. Oughton, assistant surgeon to the Revenge.

Military.—Mr. Opie Smith has been appointed veterinary-surgeon of the 11th Light Dragoons, in place of Mr. Cherry, deceased. Assistant-Surgeon Wm. Harvey, of the 9th reg., to the 9th Foot, v. Drysdale, appointed to the Staff. Staff Assistant-Surgeon David Ewing to be assistant-surgeon to the Rifle Brigade, v. Woodford, who has resigned. Hospital Staff—The following have been appointed Assistant-Surgeons to the Forces:—James Murray Drysdale, from the 9th reg., v. Ewing, appointed to the Rifle Brigade; Archibald

Alexander, gent., v. Palmer, appointed to the 92nd reg.; John Drope M'Ilree, gent., v. Fraser, appointed to the 6th reg.; and Neil Stewart Campbell, gent., v. Tuthill.

General.—Mr. Lister, surgeon to the Halifax Dispensary. Dr. Paley, physician, and Mr. Earle and Mr. Alfred Smith, surgeons to the Ripon (new) Public Dispensary.

Resignations.—Mr. Nunn, apothecary to the Western Dispensary. Charles Strut, Westminster. Mr. —, resident apothecary and accoucheur to the Farrington Dispensary and Lying-In Charity, Giltspur-street. Staff Assist.—Surgeon Woodford, of the Rifle Brigade. Mr. Hedworth, surgeon to the Leeds General Eye and Ear Dispensary. Dr. Fitzpatrick, physician to the Bedford General Infirmary.

DEATHS.

Dr. James Stenhouse, of Comely Park, Dumfermline. Dr. Wm. Thompson, of Essex-place, Princes road, Kennington. Veterinary-Surgeon Cherry, of the 11th Light Dragoons. Mr. John Taylor, of Birmingham, surgeon, aged 81. Dr. W. Smith, of Upton Magna Hall. In Taunton, Dr. Thompson, formerly of Chudleigh. John Denny, Esq., of Ipswich, retired surgeon of the 62nd Foot. At Spanish Town, Jamaica, Dr. D. Thompson Dempster, formerly of Cupar, N.B.

WEEKLY BILL OF MORTALITY.

London, Tuesday, February 24th, 1835.

Abscess	1	Inflammation	4
Age and Debility	38	Inflammation of the	
Apoplexy	8	Bowels & Stomach	4
Asthma	16	Inflammation of the	
Childbirth	3	Brain	4
Consumption	45	Inflammation of the	
Constipation of the		Lungs and Pleura	4
Bowels	1	Insanity	3
Convulsions	24	Jaundice	1
Croup	2	Liver, Diseased	3
Dentition, or Teeth-		Measles	6
ing	9	Mortification	1
Diarrhœa	1	Paralysis	5
Dropsy	12	Small Pox	11
Dropsy on the Brain	11	Spasms	4
Dropsy on the Chest	2	Stone and Gravel	2
Epilepsy	1	Stricture	1
Fever	8	Thrush	1
Fever, Scarlet	5	Unknown Causes	20
Fever, Typhus	2		
Heart, Diseased	2		
Hooping-Cough	13	Stillborn	16

Buried, Males 156 Females 166 Total 322
Decrease in Burials reported this week, 281.

CORRESPONDENTS.

Syntax.—His critique on a formulary in a contemporary journal is not suited for our pages.

Quicksilver Jack.—We have our eye upon him.

Medicus.—We believe it is not absolutely necessary that the Thirty-Nine Articles should be subscribed to in order to become a Fellow of the College of Physicians.

An Apprentice should consult with some legal adviser upon the best mode of proceeding.

Dr. Bacon.—We believe his communication to be all gammon.

Communications have been received from J. Y. on Metro-peritonitis, *A General Practitioner* on Fungus Hematodes, *Dr. Foote* on Delirium Tremens, *Dr. Gambal* on the Pulse, and a peculiar case of otitis treated by stimulants, which shall be inserted *quam citissime*.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At the Meath Hospital during the Session of
1834-5.*

LECTURE I.

GENTLEMEN,—As it is usual, at the commencement of a course of clinical instruction, to devote the first lecture to a consideration of some general topics connected with the line of studies most proper to be pursued by those who wish to attain eminence; I have, in compliance with this custom, thought it right to lay before you some observations on the proper mode of studying physiology and morbid anatomy, with a view of showing how best to derive advantages from these accessory but necessary sciences, sciences which, according to the manner in which they have been cultivated, have at different periods retarded, or advanced, that most important of all branches of professional knowledge, practical medicine. It is quite evident, that a knowledge of the functions and structure of the body in health is essential to him who undertakes the treatment of disease, and hence physiology has always occupied the attention of physicians. Physiology, however, may be studied in very different ways, and with very different objects, and, until lately, all those who were engaged in the cultivation of this fascinating science, not contented with observing the state of the different parts and tissues during health, the nature and quality of the secretions, the mechanism and operation of the different organs, sought to ascend from a knowledge of effects to an investigation of causes, and, after they had classified the more obvious phenomena of living bodies, endeavoured to ascertain, if not the very principle of life, at least those motions and causes of motion which result immediately from the action of the living principle. Having thus, as they conceived, obtained a more accurate knowledge of the conditions of health, they proceeded to form general explanations of

the causes of disease, and frame general rules for their removal. This method, apparently so philosophical, and possessing so many attractions from the generality and simplicity of its application, has more than any other circumstance contributed to retard the progress of medicine. Gentlemen, this is not only an ancient, it is also a modern, evil. We live among systems. It is true, that the practice, founded on the mechanical, mathematical, chemical, and humoral physiologies, has been long since abandoned; but the destructive system of Brown has not long quitted the stage, where its place is occupied on the Continent by those of Broussais and Rasori, and in Great Britain by the system which derives all diseases from derangement of the digestive function, or from inflammation. Physiology legitimately embraces not the study of vital actions but merely aims at ascertaining and arranging their effects. The important facts, which its study discloses, are perhaps infinite in number. As long as we confine ourselves to these we advance at every step, and all is clear and intelligible; but the moment we attempt to enquire into the causes and modes of vital action we begin to retrograde, and all becomes hypothesis and confusion. Thus, an examination of the organ of sight discovers a wonderful and beautiful optical arrangement, calculated to form on the retina a picture of external objects, exact both in its colouring and outline. The physiologist, examining with attention the different parts of the eye, and the laws of their respective refractions, investigates the means by which distinct vision is secured at different distances; he compares the human eye and its appendages with that of animals which live in water, those which soar into the highest regions of the atmosphere, and those which burrow under ground. He considers the eye of the mole, feeble but protected against injuries likely to be encountered in carrying on its subterraneous works; of the eagle who, poised high in mid-air, selects its victim from the distant pasture; of the fly, whose microscopic organ, with a range of vision scarcely exceeding the limits of contact, distinguishes objects the most minute, and in all he finds variations in the optical instrument at once curious and

intelligible. But when he endeavours to advance further in his inquiry, and tries to explain how an image, painted on the retina, produces vision, whether by the means of undulations arising from the rays of light, and propagated along the optic nerve to the brain, or whether because the retina is a nervous expansion, highly organised and framed, so as to feel the coloured image painted on it, he is at once arrested in his progress by the barrier which is every where interposed between physical and vital actions, between the mechanism of the organs of sense and the mode in which they produce ideas between body and mind.

But has he, therefore, gained no real knowledge applicable to practical purposes, or has his time been merely spent in a pleasing but useless study? By no means;—being acquainted with the mechanism and arrangement of the optical instrument, he is often enabled to remedy its accidental derangement. By means of a concave glass he corrects a too speedy, by a convex a too tardy, concentration of the rays of light. When the crystalline lens becomes opaque, his knowledge of its connexions, nature, and position enables him either to remove it altogether, or to displace it from the axis of vision, or to promote its absorption, and, in order to effect the latter purpose, he mechanically irritates it, knowing by experience, that, after such an irritation, the process of absorption commences, although he is quite ignorant of the connexion between mechanical irritation and this vital process. He who inquires into the physiology of the brain and spinal marrow can never discover the nature of nervous influence, or the manner in which pressure on these organs destroys, or irritation deranges, the motions of the voluntary muscles, and yet the entire treatment of cerebral or spinal diseases, whether spontaneous, or from the effects of injury, is grounded on a knowledge of this physical fact; without it we could not estimate the value or effects of morbid changes in the brain or spinal marrow. On this reposes the rationale of the treatment of all convulsive, paralytic, and apoplectic affections.

Although we know not the manner in which the eighth pair of nerves superintends the respiratory process, although we understand not how the phrenic nerve influences the motion of the diaphragm, yet a knowledge of these facts led to a relief of spasmodic asthma, and to the recovery of persons apparently asphyxiated, by means of the Galvanic stimulus passed along the course of these nerves. Knowing that some of the nerves, distributed to the face, are destined for sensation, while others serve for muscular motion; in cases of tic douloureux we divide the sentient and not the motive nerves. In these, and a thousand other instances, physical physiology supplies us with information at once interesting and practical; it would be still easier to prove, as in the cases of Brown and Broussais, that vital physiology, by involving us in the dis-

ussion of subjects beyond the powers of our reason, never fails to entangle its votaries in a labyrinth, amidst whose mazes they move without progressing, and consume in idle speculations that time and labour they ought to spend in the acquisition of useful knowledge. But I trust the period is at length arrived when this error will be avoided; for, on the whole, it must be confessed, that in consequence of a wrong method of studying, and a misconception of the true objects of physiology, this science has in many instances retarded the progress of practical medicine.

Let us next consider the connexion of morbid anatomy with practical medicine. Many have mistaken the end and object of morbid anatomy, and there are not wanting some who even deny its utility, while others again, in their zeal for its improvement, have endeavoured to extend its limits, so as to make it comprehend and embrace in the explanations it affords all the phenomena of disease. It is not easy to determine which of these parties has most injured the cause of practical medicine. Morbid anatomy comprehends not merely decided and permanent structural alteration, but embraces, so far as they are capable of being detected, even temporary physical changes in internal organs. In order justly to estimate its importance we should recollect that the first alteration in the texture of a part is not the cause but the consequence of disease, for in every healthy organ the texture is natural, and as every change of texture is produced in consequence of derangement in the vital action of the vascular system of the part, it is obvious that structural alteration must in the first instance be always produced by functional derangement. Thus the physical alterations which attend external inflammation; the tumefaction, the heat, the redness are not the causes but the consequences of disease. But in thus reducing them to the rank of symptoms, do we diminish their importance? Certainly not. For being immediately connected, as effects, with the primary cause, they prove the most useful of all symptoms, in enabling us to ascertain the seat and progress of diseased action. In this respect they possess a manifest advantage over the general or constitutional symptoms. Thus, in cases of spontaneous gangrene, phlegmonous inflammation, or erysipelas, what practitioner would be contented to draw his indications from the general symptoms, disregarding the appearance of the affected part? and yet this is exactly what those persons do who refuse the aid of morbid anatomy in the treatment of internal disease.

In external diseases most of the physical changes in the affected part can be at once recognised; their diagnosis is therefore comparatively easy, and their treatment well established. In internal diseases the case is widely different, the physical alterations are here beyond the cognisance of our senses; and, in order to ascertain their nature and situation,

we must carefully compare the morbid appearances of internal organs, as revealed to us by dissection, with the symptoms during life. Although alteration of structure is in the first instance produced by a disease in the vital action of the part, yet this structural alteration may itself become a new cause of mischief. Thus the vascular system of the lungs, from some unknown cause, assumes such a change of action as produces a deposition into the pulmonary texture of various fluid and solid products, by which the entrance of the air into its vesicles is prevented, and the respiratory function, one of the most important of the body, is thus considerably deranged. Again, whatever be the original vital derangement which causes scirrhus of the pylorus, the obstruction thus formed is a secondary cause of new and important symptoms. Another consideration, which enhances the value of morbid anatomy, arises from the fact, that when diseased action fixes itself in any part of the body, whether external or internal, and there gives rise to physical alterations, experience teaches us, that the progress of the disease may be often arrested by removing its effects. Thus, to recur to the example of external inflammation, the redness, the swelling, the heat of the part are but symptoms, and yet we find great benefit from the applications of remedies capable of diminishing them; hence we leech, and apply cold lotions, &c. From all these considerations it is evident, that whenever disease is attended with either a temporary, or a permanent, alteration in the tissue of an internal organ, it will be of the greatest practical importance to ascertain the nature and extent of that alteration, and the progress of practical medicine will be exactly proportioned to the accuracy with which this can be accomplished. Thus, how much has the treatment of pectoral diseases been improved by the application of auscultation and percussion, means which are only useful by enabling us to ascertain the physical alterations induced by the disease, or, in other words, the morbid anatomy of the affected organ. Without their aid, how trace the progress and follow the increase or diminution of pulmonary inflammation?—how demonstrate the existence of dropsical or pleuritic effusion within the chest?—how detect latent pneumonia?—how distinguish with certainty pleurodyne from pleurisy? I could prove the utter impossibility of distinguishing many cases of bronchitic from tubercular phthisis without their assistance. I might refer to chronic emphysema of the pulmonary tissue, a disease of great importance, but actually unknown before the time of Laennec, who first accurately described it in the dead body; indeed, before the application of percussion and auscultation, a perfect knowledge of this derangement of the pulmonary structure in the dead body would not have assisted our diagnosis, for how recognise it during life? I might bring forward dilatation of the bron-

chial tubes, another disease wholly unknown before Laennec's time, and which, before his discovery, could not be recognised by the common method of observation. I might enlarge upon the great utility of attending to the changes which take place within the chest in measles and scarlet fever, but the benefit resulting from an accurate acquaintance with the morbid anatomy of the thoracic cavity is now so generally acknowledged, that I shall rather choose my illustrations from other classes of diseases.

Nosologists, until very lately, were agreed in attributing considerable frequency to those cases of apoplexy and paralysis, which arise from serous effusion into the brain, or from a mere functional inaction or debility of the cerebral and nervous systems. This opinion was founded partly on speculative grounds, and partly on inadequate and imperfect post-mortem examinations, and in practical books the symptoms supposed to announce sanguineous, serous, and nervous apoplexy were dogmatically laid down. What was the consequence?—Most disastrous, as I have had occasion to witness, in some parts of the continent, where the elderly practitioners still adhered to the practice founded on this false pathology. What can be more melancholy than to see time wasted or misemployed in the exhibition of diuretics, to promote absorption of the serum effused into the brain, or of strong exciting remedies, such as arnica, camphor, &c., to overcome the nervous debility, in cases where copious depletion by the lancet and purgatives were urgently necessary. I do not deny that in some rare cases effusion into the brain is the cause of sudden death from apoplexy. I have seen such an event supervene in chronic dropsy, but there the termination was very sudden, and the state of the case left no doubt as to the cause; but in the majority of the cases formerly treated as serous or nervous apoplexy a more careful examination would have detected marks of vascular excitement, or local inflammation, a subject I shall treat at large when on the pathology of the brain. A similar error in morbid anatomy led to a similarly erroneous practice in the treatment of hydrocephalus, and many cases of general and local dropsy. The effusion occupied the sole attention of pathologists; the marks of preceding vascular excitement or inflammation escaped their notice.

Time will not permit me to enlarge upon the light which morbid anatomy, rationally pursued, has shed upon diseases of the brain. It is sufficient to remark, that some of the most important modifications of inflammation in that organ have been only lately discovered, and it is only lately that a minute and extensive examination of the different changes the brain undergoes in disease, has begun to introduce a certain degree of regularity and precision into a department where all before was confusion and inaccuracy. Examples of

the utility of morbid anatomy might be brought forward without number:—the discovery of local inflammation being at times the cause of a disease in most of its symptoms resembling common ague; the use of the lancet in the cold stage of ague, a practice which may be advantageously resorted to, in cases where each return of the fit is accompanied by a recurrence of inflammation in a vital organ, as the lungs or brain; the connexion between inflammation of the mucous membrane of the stomach, and some of those symptoms of fever formerly attributed to mere debility; the influence of cerebral inflammation and congestion, in producing the symptoms formerly vaguely denominated typhus; the low character which fever assumes when accompanied by pneumonia (and that, too, often latent); the symptoms which are produced by follicular ulceration of the intestines, which so frequently occurs in the course of fever; the diagnosis between the pain produced by neuralgia of the abdominal nerves, and that resulting from structural diseases of the intestinal canal; a more accurate knowledge of the state of the mucous membrane in the diarrhoea of phthisis, and in intestinal tympanitis; the numerous improvements in the treatment of diseases of the ear, which followed Itard's investigations concerning the morbid anatomy of that organ;—these and many other discoveries, all replete with practical advantages, are the results of the attention of our contemporaries to morbid anatomy; and, were I to appeal to the records of surgery, I might bring forward examples, if not more important, perhaps more evident and striking, for the invention and success of most capital operations depend on a perfect knowledge of the structural derangements, the removal or cure of which is attempted. Of this, examples suggest themselves on every side, but none is more striking than the one devised by Dupuytren for the cure of artificial anus, the most disgusting and loathsome malady to which human nature is subject, and deemed altogether incurable, until that excellent surgeon, by a combination of profound pathological and physiological knowledge, succeeded in planning and executing an operation, that were alone sufficient to immortalise his name.

The study of morbid anatomy, however, is attended with no ordinary difficulties, and, when imperfectly understood, is liable to lead to erroneous results, for it requires much candour, much patience, and that experience which can be only acquired by long continued practice, to enable us to judge concerning diseased appearances. The power of accurately discriminating in the dead body the traces of disease cannot be suddenly acquired, and so numerous are the various errors to which superficial observers are liable, that much injury has thus resulted to medical science, diseased appearances being in some cases overlooked, and in others recorded where

they did not exist. Those who are aware how often the congestion, which frequently takes place immediately before or after death, in the pulmonary tissue, in the mucous membrane of the lungs and alimentary canal, and who know how often this congestion alters the physical properties of these parts, so as almost exactly to simulate the vestiges of inflammation, will understand how it happens that in investigations connected with the real or supposed diseases of these parts, facts have been marshalled against facts, and observations arranged against observations, until the path which promised simplicity and order terminated in perplexity and confusion. Hence the doctrines of Broussais received so many corroborations, and appeared to rest upon a numerous series of undoubted and well authenticated facts.

The morbid anatomist must of all things beware of seeing too much. He must avoid imposing on himself by everywhere seeing exactly what he expected to see, and above all things let him not always force himself to see something; for many diseases proceed to a fatal termination without having produced any evident morbid alteration.

When I come to treat of the pathology of the brain and nervous system, I shall have occasion to advert to errors which late authors have committed from too great an anxiety on the one hand to reduce to a certain and definite system the morbid appearances of the brain and spinal marrow, as connected with their diseases, and, on the other, to find, in every case where the cerebral or nervous functions had been diseased, lesions of structure to account for the symptoms. Thus, to cite one of numerous instances, I shall have occasion to prove that epilepsy and mania often commence suddenly and violently, without the existence of any organic alteration; and, indeed, that organic lesions are not necessarily connected with these formidable diseases is sufficiently proved by the occasional sudden manner in which they cease. Thus, a gentleman of great literary reputation was many years a patient of mine before his death, which happened in 1831, at the age of seventy. From the age of twenty-five to fifty-five he suffered from violent and frequently recurring fits of epilepsy; after having continued thirty years the disease ceased suddenly, without any assignable cause, and for the last fifteen years of his life he had not a single fit. I shall have occasion to show you how fine-drawn and how ill-founded the observations of those who profess to account for every nervous disturbance during life by cerebral lesions, who profess to distinguish accurately during life inflammation and irritation of the arachnoid or dura mater from irritation or inflammation of the brain itself, who maintain that one series of symptoms is produced by inflammation of the cortical, and another by inflammation of the medullary, substance, who have strained their eyes to discover, and their veracity to

impose upon us, proofs that inflammatory or other diseased states of certain portions of the brain caused invariably similar affections of certain mental functions. These errors of some, even of the most eminent French pathologists, it will be my duty to notice from time to time; but I am sorry to say that much more unpardonable errors and misstatements have found their way into English and Irish publications on the pathology of the brain, and which I shall be compelled to speak of hereafter.

Having made the preceding observations on the dangers which arise from an ill-directed application of the studies of physiology and morbid anatomy to the practice of medicine and surgery, I feel myself imperatively called on to present the other side of the question to your view, in exposing the still more dangerous doctrine advocated by those who depreciate the value of pathology and morbid anatomy as only instructive after the death of the patient, and even then as not unfrequently calculated rather to mislead than to advance the interests of practical medicine.

It must be conceded that he who is only a physiologist cannot hope to cure disease, and that the mere morbid anatomist will be often misled by post mortem appearances, if he has not attentively watched the progress of symptoms and the effects of medicines during life, for, unless this be done, he will, as I have already said, often mistake secondary for primary lesions, will confound effects with their causes, and will refer to certain alterations of structure that which had originated in a functional disorder, a morbid state of parts very different from that which is observed after death. But when, to an accurate knowledge of physiology and morbid anatomy is joined an extensive observation of the progress of symptoms and the effects of therapeutical agents, how much more certain and satisfactory will be our practical decisions, and how much more likely our efforts to be attended with success, than if we merely studied disease at the bed-side of the patient. In the latter case, we might indeed become expert nosologists, be accurately acquainted with certain groups of symptoms, and even not unfrequently adopt the proper method of treatment. These symptoms, considered together, we would call by a certain name, and hand down to posterity this new acquisition of medical knowledge, perhaps clothed in the garb of a dead language, and invested with the false dignity of a learned tongue. But what have we really thus effected for posterity?—Our followers read our definitions of disease with an acquiescing admiration, and, sure of the efficacy of the remedies we have recommended, they go forth with an overweening confidence in the quest of the group of symptoms we have described, and when they have met with them they look upon their task as already half accomplished, and promise a successful termination of the disease. "Tell me the

name of the disease," was the motto of the nosologist, "and I will tell you the remedy;" but, gentlemen, I will engage to tell you the names of a hundred diseases, without your being able to name the proper method of treatment. I tell you a man has dropsy, his limbs are anasaruous, water is accumulated in the peritoneal cavity, his urine is scanty, and his thirst increased. Will you, from this very excellent nosological definition, venture to prescribe for this case of dropsy? For the sake of the suffering patient and your own conscience, prescribe not on such data. And yet I regret to be obliged to say, that such a method of proceeding is by no means rare, nay, it is even a matter of daily occurrence. But this case of dropsy will not yield. Some other boasted specific hydragogue or diuretic is had recourse to; still the patient grows worse and worse, and finally dies, but his friends are not discontented with the medical attendant, who excuses himself by asserting that he has successively resorted to every remedy which has been recommended in dropsy; and in truth if you look over the list of medicines exhibited in rapid succession, you will probably find that his excuse is not unsupported by facts. But, gentlemen, these cases in which every thing has been tried, are exactly those in which nothing has been tried, in which medicine has followed medicine, and each symptom of disease has indiscriminately been the object of attack, until death approaches with accelerated steps, and charitably closes a scene distressing to humanity, and disgraceful to the cause—I was going to say—of science, but who will venture to give so ennobling a name to this pseudo-practical knowledge, this worse than absolute ignorance?

Gentlemen, I am not combating phantoms; I do not, Quixote-like, contend with imaginary giants; no, gentlemen, what I have described exists, the picture I have drawn has many an original. But let us have done with this subject; let us turn to the gratifying considerations of the progress which practical medicine is making under its parent science,—physiology and morbid anatomy.

The reason of man is now more fully employed than at any former period, a vast store of mental power, a vast mass of mind is everywhere at work; what formerly was vainly attempted by the labour of a few, is now easily accomplished by the exertions of the many. The empire of reason, extending from the old to the new world, from Europe to our Antipodes, has encircled the earth—the sun never sets upon her dominions,—individuals must rest, but the collective intelligence of the species never sleeps; at the moment one nation, wearied by the toils of day, welcomes the shades of night, and lies down to seek repose, another rises to hail the light of morning, and, refreshed, speeds the noble work of science!

All inquirers commence, as it were, at the same point, as the labours of their predecessors are equally at the disposal of all, and conse-

quently it is not surprising we should often find them arriving together at the same end; thence the numbers of simultaneous discoveries of the same fact now so common. It is not unusual to find the publications of France, Germany, Italy, and England, simultaneously announcing the same discovery, and each zealously claiming for their respective countrymen a honour which belongs equally to all. I am sorry to say that, with some splendid exceptions, this interesting and innocent controversy has been carried on by other countries, while Ireland has put in no claim for a share of the literary honours awarded to the efforts of industry or genius. But, gentlemen, I hope that this state of inaction, this state of mental torpor, has ceased, and that the time has passed away when we could not point out among our brethren any who had advanced the boundaries of the medical sciences, and thus promoted the interests of humanity. Already have the names of several of the senior members of the profession been spread abroad, already has the scientific character of this city been elevated by such men as Dease, Blake, Colles, Carmichael, Cusack, Crampton, Marsh, and Kirby; and already have some of the junior members of the profession attached their names to discoveries which shall be commemorated as long as anatomical sciences are cultivated; I need scarcely add that I allude to the names of Jacob and of Houston. The interesting descriptions given by these gentlemen of their respective discoveries, in a department of human anatomy in which all further discovery was looked upon as hopeless, are probably known to you all, and therefore it is unnecessary now to enlarge upon them. Neither have we, at present, leisure to enter into the no less interesting field of investigation which Dr. Corrigan has opened by the publication of his experiments on the sounds and motions of the heart, experiments leading to conclusions so novel, that most physiologists were at first incredulous, and many even ventured boldly to call into question their accuracy. Without at present venturing to decide whether Dr. Corrigan's opinions be in every respect correct, I may assert, that his paper is written in the true spirit of philosophical inquiry, and that he deserves opponents of a far higher grade than those who have endeavoured to refute his arguments in the English periodicals.

With regard to the treatment of disease, we must not omit the discovery, by Mr. Carmichael, jun., of this city, of the curative effects of spirits of turpentine in iritis, for although we were in possession of two valuable remedies for the cure of this disease, belladonna and mercury, yet there are cases in which it is useful to be able to accomplish a cure without the aid of salivation.

It is with feelings of the greatest satisfaction and pride, that I claim the right of adding to this list the names of three gentlemen whose friendship I have long enjoyed, Mr. Adams,

Mr. McDowell, and Dr. Stokes. Of the two former it is unnecessary to speak, their contributions to science are so well and so duly appreciated. Concerning the latter, my colleague Dr. William Stokes, I shall impose upon myself an unwilling and constrained silence, partly because his merits claim a warmer and longer eulogy than would suit this time and place, but chiefly because his labours have placed him in a position, as far elevated above the necessity of praise, as above the fear of censure*. Neither shall I allow myself to eulogise as they deserve the talents and exertions in the cause of science rendered by Professors Apjohn, Harrison, Kane, Montgomery, and E. Kennedy. They all rank high among the successful cultivators of some of the most useful departments connected with our art; their names, associated with those already enumerated, form a catalogue the subject of congratulation for the present, of happy augury for the future, for cold must be the breast of him who will not hail with joy every symptom of our country's literary regeneration, dead the feelings which are not elated at the boon conferred on our species by every advance made by those who devote themselves to the grand, the noble, pursuit of relieving the suffering, of healing the diseased; but time bids me stop, I shall, therefore, conclude by observing that the attention lately devoted to the distinctions between real and pseudo-morbid appearances, the diligent cultivation of morbid anatomy by men not the slaves of preconceived opinions, the abandonment of all systems whose baseless fabric rests on the phantoms of vital physiology, the importance now justly attached to medical statistics, to the study of endermic and epidemic maladies, to the operation of morbid poisons; these, and various other circumstances, give us reason to hope that the progress of the human mind in investigating the means of preventing and curing diseases, will not be less rapid than it has been in the other departments of knowledge; and thus it will be proved that if man has passions which impel him to the destruction of man, if he be the only animal who, despising his natural weapons for attack or defence, has devised new means of destruction, he is also the only animal who has the desire or the power to relieve the sufferings of his fellow-creatures; the only animal in whom the co-existence of reason and benevolence attests a moral as well as an intellectual superiority.

* If praise from a praiseworthy person, the "*laudari a laudato viro*," be an enviable distinction, how desirable, on the same principle, must be the censure of Mr. Wakley.

LECTURES

ON

MIDWIFERY & THE DISEASES
OF WOMEN AND CHILDREN,BY EDWARD RIGBY, M.D., F.L.S.,
ASSISTANT PHYSICIAN-ACCOUCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXI.

*Mechanism of Parturition—Presentations of
the Face and Nates.*

GENTLEMEN.—At my last lecture I endeavoured to explain the manner in which the head of the child presents at the beginning of labour, and the course it takes in passing through the pelvic cavity and outlet. From what I then told you, you will perceive that there are two positions of the head, in both of which the sagittal suture corresponds to one of the oblique diameters; in the most common the occiput is turned to the left foramen ovale, in the other to the right foramen ovale, with the exception that in this position, during the early periods of labour, it is turned to the right sacro-iliac synchondrosis, and gradually moves forwards as labour advances. Whether or not the first position in many cases is originally the fourth, as the second is at first the third, is difficult to say, but, from the interesting observations communicated to me by Mr. Blount, of Birmingham, and from some cases which I have met with, it does appear that, at an early period of labour, the head is more frequently in the fourth position than has been imagined, but that it soon passes into the first or most common, viz. with the posterior fontanelle forwards and to the left.

Before describing to you the manner in which, according to Professor Naegele's extended experience, and my own observations, the face presents at the beginning of labour, it will be necessary to give a short enumeration of the various positions in which the face is said to present by the schools and systematic works on midwifery. Four presentations are usually enumerated, two with the *chin* more or less forwards, viz. the first with the chin corresponding to the left, the second to the right acetabulum, and two with the *forehead* more or less forwards, corresponding to the left acetabulum in the third, and to the right in the fourth position, as the chin did in the two first. We are told that in the first and second positions, as the head advances through the cavity of the pelvis, the chin gradually turns forwards towards the pubes, and by the continued pressure of the uterine contractions rises up sufficiently behind it so as to allow the forehead to descend and pass over the perineum, which it distends immensely, and clears the external opening with great difficulty. In the two last positions, the chin undergoes the same movements as the forehead has done in

the two former ones; the forehead rises up behind the pubes, and the chin sweeps with great difficulty over the perineum. These are the four positions of the face according to the German schools, but Baudelocque, and after him the French authors, have added two other presentations where the face is in the antero-posterior diameter of the pelvis. "Of all those," says Professor Naegele, "I have only seen the two first, and I speak from considerable experience, for a great number of face presentations have come under my observation. As I allow of only two presentations of the cranium, in like manner I can allow but two of the face, the chin to the right, and the chin to the left, which, although exactly contrary to the order of face presentations, according to Stein, Siebold, &c., yet I have the satisfaction of knowing that the experienced Madame La Chapelle agrees with me*."

According to the experience of Professor Naegele, and those cases which I have myself had an opportunity of observing, that position of the face is the most frequent, when, at the beginning of labour, the forehead is turned towards the left ilium; in this case the right side of the face is that part which presents, the zygoma and eye being nearly in the middle, and situated lowest in the pelvic cavity; as the os uteri gradually dilates, what in the first position would have been the sagittal suture is here the root of the nose, and this is what the finger first touches upon, as it enters the os uteri. The swelling which the face brings with it into the world is situated upon the right cheek, exactly as in the first position of the head, it is on the superior and posterior quarter of the right parietal bone. As in this position the posterior fontanelle gradually moves from left to right, so now in the present case the chin moves from right to left, and passes under the pubic arch.

In the second position of the face, the forehead is turned towards the left ilium, the chin more or less to the left foramen ovale; it is precisely the contrary of the first position; the left cheek and zygoma are lowest in the pelvis, and the chin moving from left to right passes first under the pubic arch.

In the third and fourth positions of the face, according to the German schools, where the forehead is turned towards the pubes, as the face enters the pelvis, being too broad and too flat to pass under the pubic arch, it is, by the continued pressure of the uterine contractions, forced upwards behind the symphysis, and the chin with great difficulty sweeps under the perineum, which it distends enormously.

Now this, gentlemen, is evidently impossible; for, if you consider but for a moment, you will find that to allow the head to pass under the pubic arch in this manner, would require a neck of, at least, *seven inches* in length.

The two positions which Baudelocque de-

* MS. Lectures.

cribes, where the long diameter of the face is said to be in the antero-posterior diameter of the pelvis, are still more ridiculous, for it will be evident that in such a position there must be a moment when the head with its perpendicular, and the breast with its antero-posterior, diameter, are at one and the same moment engaged in the antero-posterior diameter of the pelvis. Now the former measures three inches and a half, and the latter, two inches and a half, making in all a diameter of six inches, and this to pass through an aperture which, even in the skeleton, measures only four inches and two or three lines. In Guillemeau, Mauriceau, La Motte, Levret, Stein, &c., in whose works an immense number of cases have been recorded, you will find no such case as that I have now mentioned. What speaks still more against it is that Madame La Chapelle, the most experienced person whom the annals of midwifery have yet produced, who did not become an authoress until she had actually observed upwards of *forty thousand* labours at the Maternité of Paris, declares that such a case is impossible. The engraving of such a position which is in Smellie's plates, and which seems to have been the foundation of Baudelocque's description, is, as La Chapelle rightly observes, merely a seven months' foetus, where the cranial bones were little more than cartilage, and where the head was squeezed into a form more like a sausage than anything else I can compare it to. It was also described to have been born with great rapidity.

In the former century, presentations of the face were always considered as preternatural, and not capable of being terminated without artificial assistance; thus we find that Smellie, Stein, Osiander, and other distinguished accoucheurs of that time, turned the child in these cases. Baudelocque tried to push back the face, and bring down the vertex, but if this did not succeed (which was almost always the case), he either turned the child, or extracted it with instruments, and thus numbers of children were sacrificed. Portal was the first who considered that a presentation of the face differed but little from a natural birth, "except that the face of the child commonly appears black, which is easily removed by fomentations." "This delivery," says he, "is very troublesome to the mother, from the external parts being more distended than in any other labour." La Motte remarked that the pains in presentations of the face "were generally violent and without intermission, but," says he, "I have never seen any that have not done well." Nevertheless, if the pains were weak, and the child not far advanced in the pelvis, he recommends searching for the feet and turning the child. Giffard also recommended turning, although when called to cases where the head was already low in the pelvis, he generally applied his extractor.

Such, gentlemen, was the practice in cases of face presentation, from the time of Portal,

in 1685, till 1770, when Deleurye again brought his views into notice, and declared that the head in these cases could be born by the natural powers. After him, Boer, of Vienna, supported the same opinion in Germany, although opposed by Stein and Osiander; but it was not until the beginning of the present century that presentations of the face entirely ceased to be considered preternatural; so far from being preternatural, there are more living children born in cases where the face presents, than where the nates or feet present; nevertheless, these are decidedly not so favourable as where the cranium presents. In presentations of the cranium, where there is a slight diminution of proportion between the head and pelvis, the progress of the labour is but little affected, whereas, in cases where the face presents, the most trifling unfavourable circumstance of this sort will present serious difficulties to the passage of the head. Thus, for instance, the difference of half an inch in the antero-posterior diameter of the pelvis is of little consequence in cases where the cranium presents; the labour, it is true, will be prolonged, but the child will be born healthy and active, whereas, under similar circumstances, where the face presents, the child will generally be born dead. Many reasons have been assigned why children are occasionally born dead in face presentations; some have imagined that the spinal marrow was injured by the long and forcible degree of extension to which the neck was exposed. Osiander asserted that it was from the air coming in contact with the face some time before the head was born; the child was thus excited to make inspirations, but from the pressure was unable to continue them, and therefore died. Professor Naegele has examined several children, which have died during labour where the face presented, but has never found the least air in the lungs. Smellie has noticed the real cause in the explanation to his 25th plate. "But if the head is large, it will pass along with great difficulty, whence the brain and great vessels of the neck will be so much compressed and obstructed as to destroy the child." Chaussier, the celebrated physician to the Maternité at Paris, has examined these cases with great attention, and has uniformly found the cerebral vessels gorged with blood.

So much, gentlemen, for presentations of the face; I now come to those of the *breech* or *nates*, and, following the same arrangement as I have done when speaking of positions of the head and face, I shall now briefly enumerate those positions of the nates which are described in systematic works, and will then give you a more accurate and, I trust, more simple view of them as they usually occur in nature. Four positions are described; the two first with the abdomen of the child backwards, the two last with the abdomen forwards. In the first position, the abdomen and anterior surface of the child are turned

towards the *left* sacro-iliac synchondrosis. In the second position, the abdomen, &c., are turned towards the *right* sacro-iliac synchondrosis; in the third, they are turned towards the *right* foramen ovale; in the fourth, they correspond to the *left* foramen ovale.

According to the works on midwifery, as the nates pass through the pelvic cavity, the right ischium (in the first position) will gradually turn towards the pubes, but not being able to pass under the pubic arch, and as the left ischium has more room in the hollow of the sacrum, the right rises behind the pubes, while the left ischium passes over the perinæum; the shoulders turn into the antero-posterior diameter of the pelvis, the right being behind the pubes, the left in the hollow of the sacrum; the head follows with the chin upon the breast, and the chin being in the hollow of the sacrum comes first over the perinæum in the same manner as the left ischium did.

The third and fourth positions of the nates, viz. where the anterior parts of the child are turned forwards, are considered to be more unfavourable than the first and second, on account of the chin being apt to quit the breast, and lodge upon the symphysis pubis.

With respect to the diagnosis, we are told that a discharge of meconium, and the being able to feel the head in the fundus of the uterus, are signs of a nates' presentation; but we must not rely on these alone, for, as you are well aware, the meconium will frequently escape, where the head or other parts present, if the child be dead. The ischium is also said to be diagnostic of a presentation of the nates, but it is so thickly covered with flesh, that to distinguish the nates by this alone is impossible, because it may be very easily mistaken for a shoulder, or even parts of the face. As in presentations of the face, the nose is the only sure diagnostic mark, so here it is the inferior extremity of the sacrum, which not only serves to show that it is a nates' presentation, but enables us to distinguish which *species* of presentation it is. With respect to the parts of generation, as a means of diagnosis, nothing can be more deceptive.

According to Professor Nægele's experience, presentations of the nates may be classed under two heads; first, where the back of the child is turned forwards towards the anterior parietes of the uterus; secondly, where the back of the child is turned towards the posterior parietes. In both cases, one usually finds the back of the child at the beginning of labour turned more or less sideways, namely, the ischia running parallel with one of the oblique diameters of the pelvic entrance. The first chief division occurs more frequently than the other; but at the same time the difference between the two is not great. The feet originally are always situated in the vicinity of the nates, and at the beginning of labour are sometimes felt at the same moment. If, however, they

are situated rather higher than the nates, as these descend into the pelvis the feet rise upwards, are turned on the abdomen and breast of the child, and in the course of the labour are born with them at the same time; but if they be situated somewhat lower, they slip down before the nates. Hence it is evident that presentations of the knees and feet have been originally presentations of the nates; in fact, those of the knees cannot be considered as a distinct presentation.

"In every case, whether the nates have at first a completely transverse or oblique direction, they will be always found, on pressing lower into the superior aperture of the pelvis, to have taken an oblique position, and that ischium, which is directed anteriorly, to stand lowest. They pass through the entrance, cavity, and outlet of the pelvis in this position, which is oblique, both as to its transverse diameter as well as to its axis. Thus, if in the first species the left ischium were either originally directed more or less forwards, which is usually the case, or had taken this direction in passing through the superior aperture, the nates descend in this direction into the pelvic cavity, with the left ischium during the whole time standing lowest; and this is the part, during the further progress of the nates, which first passes between the labia as the os externum dilates.

"As they advance, and while the left ischium, which is directed forwards and always somewhat to the right, comes completely under the pubic arch, and presses against it; the other ischium, which is situated in the opposite direction, and which has to make a much greater circuit, passes forwards over the strongly distended perinæum, so that when the pelvis is born the abdomen of the child will be directed to the inner and posterior surface of the mother's right thigh. The rest of the trunk follows in this position; and, as the breast approaches the inferior aperture of the pelvis, the shoulders press through its superior aperture, in the direction of the left oblique diameter; and during its passage, (viz. the breast through the pelvic outlet,) the arms and elbows, which were pressed against it, are born at the same moment. But, whilst the shoulders are descending in the above-mentioned oblique position, the head, which during the whole progress of the labour rests with its chin upon the breast, presses into the superior aperture in the direction of the right oblique diameter, viz. with the forehead corresponding to the right sacro-iliac synchondrosis, and then into the cavity of the pelvis in the same direction, or one more approaching the conjugate diameter; after this, it presses through the external passage and the labia in such a manner, that, whilst the occiput rests against the os pubis, the point of the chin, followed by the rest of the face, sweeps over the perinæum as the head turns on its transverse axis from below upwards.

"But it is sometimes the right ischium

which in this chief division is either originally turned forwards or in the process of time assumes this direction. In this case the child passes the pelvis in the same manner as before, only with this difference, that the surface of the body takes of course a different position with respect to the pelvic parietes, viz. its anterior surface, which in the former case corresponded to the right side of the pelvis, will be here directed to the left, and the head will press through the superior aperture of the pelvis in the direction of the left oblique diameter, the forehead passing before the left sacro-iliac synchondrosis.

“As in positions of the cranium the swelling of the integuments is chiefly met with on that parietal bone which, during the passage of the head through the pelvis, is situated lowest, and on that spot with which it enters the external passage, so in this case the livid-coloured swelling appears on that part which, directed forwards, was situated lowest during the passage of the nates, and with which the nates were born.

“In the second chief position, viz. with the anterior surface of the child corresponding to the anterior abdominal parietes of the mother, it is chiefly the left ischium which is either originally situated forwards, or takes this direction as the nates sink through the superior aperture of the pelvis, which latter preserve this oblique direction during the farther progress of labour, both whilst pressing into the pelvic cavity and when entering the external passage. If the ischia be already born, the anterior surface of the child turns itself to the right and backwards, either immediately or as the rest of the trunk advances, so that the manner in which the head in this case presses through the entrance, cavity, and outlet of the pelvis, is the same as has been already described.

“It not unfrequently happens, that, in this species of nates presentation, the right ischium is either originally directed forwards or takes this direction. In this case the nates will move through and clear the pelvis in the same manner as before, only with the difference, of course, that the anterior surface of the child will be situated forwards and to the left. The child also makes a turn, as in the other case, either immediately after the nates have passed through the os externum, or when the rest of the trunk has advanced further, only that here its anterior surface will turn backwards and to the left; in like manner, also, as the head presses through the superior aperture, the forehead will here descend, corresponding to the left sacro-iliac synchondrosis*.”

Thus you see, gentlemen, that in presentations of nates, whichever way the body of the

child may be turned at the beginning of labour, yet, if the progress of labour be not interrupted, the head, as it enters the pelvic cavity, will always turn, so that the forehead shall correspond to one or other sacro-iliac synchondrosis. In no presentations is so much mischief done by unnecessary interference as in those of the nates; the position in which nature has placed the child is the most favourable possible for its passage through the pelvis, and any attempt to alter it runs the risk not only of rendering labour more tedious, but of putting the child's life in the most imminent danger. The chin, during its passage through the pelvis, will constantly remain pressed upon the breast, and will have the effect of directing the head into and through the pelvis in the most favourable position. The arms remain pressed upon the breast; the soft passages, from the gradual advance of the child, are dilated sufficiently slowly, so as to oppose less resistance to the head as it follows, and, from the progress of the labour being sufficiently slow, the uterus will be but gradually relieved of its contents, its contractile power increased, and itself rendered capable, by means of sufficiently powerful exertions, of forcing the head into and through the pelvis within a proper time.

As far as the mother is concerned, presentations of the nates are scarcely, if at all, more unfavourable than those of the head, but for the child it is very different; if circumstances occur, by which the head is at all delayed in its passage through the pelvis, the cord is liable to be compressed, and the child thus destroyed. What keeps the chin upon the breast? the action of the uterus acting upon the lever, which is formed by the long diameter of the head; if the accoucheur tries to hasten delivery by attempting to pull the child, what is the result? The uterus ceases to press upon the head, the chin leaves the breast, as there is now a free space beneath the chin, the arms, which were before crossed upon the breast, slip into it, and then pass up on each side of the head; the head, moreover, comes with its long diameter into the cavity of the pelvis. In those cases, where the anterior surface of the child has been turned forwards, and the head has been described to have come first with the occiput over the perineum, we may be tolerably certain that this has been the result of pulling.

Presentations of the nates and feet must be reckoned among natural labours; there is certainly, during one part of the labour, a period of considerable danger to the child, viz. when the head is passing through the pelvis, for at this moment the umbilical cord is liable to be compressed, and hence it is why presentations of the nates are more dangerous than those of the face. Presentations of the feet are decidedly not so favourable for the child as those of the nates, although they are much easier for the mother; where the child comes double, as in nates' presentations, the pass-

* Mechanism of Parturition. Although Dr. Dewees does not coincide with me as to the mechanism of labour in nates presentations, still the order in which they occur is precisely the same.

ages are more distended, and it opposes a greater resistance to the efforts of the uterus, which is thus excited to more powerful exertions, and this is an important point. On the contrary, where the feet present, the opposition is much smaller, the trunk is born rapidly, but the head remains behind; for, at this critical moment, if the uterus has been suddenly emptied of part of its contents, the pains will cease; hence, although footling cases are less painful, they are much less desirable than nates' presentations. On the whole, therefore, as long as the pelvis is well-formed, the child not too large, and the pains good, there is every chance of a successful termination; but, if the contrary be the case, the labour is prolonged, the cord becomes compressed, and the child is lost. One favourable circumstance, connected with the nates' presentations, is, that they seldom occur in first labours.

With respect to the degree of frequency with which the various presentations, which I have described in this and the preceding lecture, occur, the average, taken from a very large number of labours, is, of a hundred births, a child will present with the cranium in ninety-three or ninety-four times, about four times with the nates, or feet, but the face does not present more than once in two hundred times.

ON THE PROXIMATE AND EXCITING CAUSES OF PHLEGMASIA DOLENS.

BY J. H. HORNE, ESQ., M.R.C.S.

IN order that all the phenomena of any particular disease may be satisfactorily accounted for, or acknowledged by the profession, it is highly desirable that the causes of the disease should be established. I believe this has not been effected in the present subject, hence there have been sufficient grounds for the opponents of a distinguished member of the profession, Dr. Robert Lee, to doubt, or even object to, what the Doctor has advanced respecting the pathology of phlegmasia dolens. The acknowledged interest of the subject, and the diversity of opinion among medical, especially our obstetrical, writers, respecting the causes of it, will be considered, I hope, a sufficient apology for my endeavouring to direct the attention of the profession to these essential points.

The various causes hitherto assigned by authors for the production of phlegmasia dolens, are translation of the lochia (Mauriceau), translation, or deposit of milk in the affected part (Perzos and Levret), morbid condition of the lymphatic vessels (White), rupture of the lymphatics (Frye), or inflammation of all organs except the bones (Hull),

pressure of the gravid uterus during pregnancy (Dr. D. Davis).—See Dr. Ryan's Manual of Midwifery, 3rd edition, page 651. Since the disease, within the last few years, has been more thoroughly investigated, and cases have occurred after suppressed menstruation and abortions, it is acknowledged that these are not sufficient to account for it. Dr. Lee attributes various causes for the production of phlegmasia dolens, viz. "suppressed menstruation, malignant ulceration of the os and cervix uteri, as well as some other organic diseases of the uterine organs." These diseased conditions of the uterus cannot be assigned as the causes of the affection, but should, I think, rather be considered as occurring occasionally in conjunction with it, for cases of suppressed menstruation and malignant ulceration of the uterus may be seen daily, but not the least traces of the disease under consideration are to be found with them. Or if we admit these conditions of the uterus as the causes of phlegmasia dolens, we must also admit, I think, that polypus, carcinoma, and the cauliflower excrescences of the uterus are the causes of leucorrhœa; whereas every member of the profession is well aware, that these malignant affections are frequently traceable to neglected or maltreated cases of that disease.

Mr. Cruickshanks remarks, in a note to Mr. Frye, of Gloucester, quoted by Dr. Lee, in his excellent work on some of the most important Diseases of Women, page 147, that "they have imputed the swelled limb, which happens after lying-in, to a *dépôt-de-lait*, but it is owing to something wrong in the constitution," which is a remarkable fact; but it has not been, I think, attempted to be pointed out what this something wrong in the constitution originates from; therefore it will be my province at least to attempt to point out what it is. How far I may succeed in effecting this desirable object I must leave the profession to judge.

Having taken this cursory view of the subject, I trust I shall now be able to prove, that my hypothesis of the primary cause of the affection, is founded on that deranged condition of the morbid parts that we find after death, and which alone, I believe, can be promulgated as satisfactorily accounting for the disease, whether it occurs after menstruation, abortion, or parturition.

I maintain, then, that the proximate cause of phlegmasia dolens arises primarily from a deranged condition of the menstrual function, causing an undue action in the vessels concerned in the production of this necessary secretion, and from the constant source of irritation kept up by the speedy return of the periodical function, that a morbid state commences in the minute ramifications of the hypogastric veins, which gradually extends, as the source of irritation continues, along the course of the iliac and femoral vessels, and by degrees a thickening of the coats of the vessels follows; and in those cases which terminate fatally, after the disease has become fully de-

veloped, a perfect obliteration of their canals is found from a deposition of fibrinous and earthy matter, demonstrable by chemical analysis.

I have attempted for some time to overturn this hypothesis by arguments and practical facts, but there are none that I have been able to produce which can possibly account for the extraordinary fact, that this most interesting, and, when genuine, most destructive disease, which not unfrequently manifests itself in a few hours, and almost within as short a period proves fatal, and what immense disorganisation of vessels we find, after these speedy and fatal cases, at the post mortem inspection; and how actively engaged must have been the organs concerned in manufacturing the immense mass of disease that exists. If we do not admit that something wrong in the constitution has been set up for an indefinite time, gradually progressing, as stimulated by the source of irritation, the deranged function of menstruation, proved by the return and increase of pain in the hypogastric region, and along the course of the crural vessels, at each period of the catamenial secretion, or how can we account for the phenomena of this disease, that otherwise would appear to be produced at a time when all the functions of the body are in a great measure suspended.

It has long since appeared evident to me (I may have been mistaken), that those who have favoured us with their views on phlegmasia dolens, have for the most part allowed their attention to have been too much rivetted to that time when the disease generally makes its appearance, viz. after parturition, or during the period of utero-gestation. But this process, I believe, is no further concerned with the disease than the debilitating effects arising therefrom, and it matters not, however naturally or easily the labours may have been performed; for within twenty-four or forty-eight hours after the best accomplished ones, it is frequently our distressing lot to witness the greatest degree of debility ensue; and it is this debility that seems so admirably calculated for developing phlegmasia dolens, which does also, we find, supervene, either after high febrile or constitutional disturbance, from suddenly suppressed menstruation, or after abarctions; and if my hypothesis of the proximate cause be maintainable, we shall also, I think, be able to prove the exciting cause, viz. debility.

Before I give in detail a few cases of phlegmasia dolens in support of what I have advanced, I beg leave to observe, in order that I may not be mistaken, that a sudden suppression of the menses by the common exciting causes, such as cold, sudden fright, febrile action, are not sufficient, as far as my observations have gone, to produce it, unless the catamenia have been previously affected, and the necessary morbid change has taken place or commenced, either in the hypogastric, iliac, or femoral vessels, and this morbid change, I

presume, is the something wrong in the constitution hinted at by Mr. Cruickshanks, which I alluded to before, and have now, I hope, satisfactorily explained or accounted for.

CASE I.—A female, aged 27 years, residing in St. Martin's-street, Leicester-square, consulted me in 1832, who I found had suffered from painful menstruation nearly from the beginning of its first appearance, and, for the last seven or eight years, from being constantly exposed to the depressing effects of the nocturnal vicissitudes of the atmosphere, her general health had become greatly debilitated, and the catamenia scarcely ever appeared without the sufferer experiencing fresh attacks of cold, with increase of pain, and difficulty attending it. In April, a total suppression of the menses occurred, followed by violent fever, high constitutional derangement, accompanied with great tenderness of the hypogastrium, thigh and calf of the right inferior extremity, with enlargement and loss of power in that limb. Suddenly the fever assumed the typhoid character, and the consequent debility my patient's shattered frame could not withstand, and death ensued a few hours after the typhoid fever set in. The post mortem appearances confirmed the disease. The coats of the common external iliac, femoral, and hypogastric veins of the affected side were thickened, and the canals of the two former vessels were almost completely plugged with firm coagula. Evident marks of recent inflammation were traceable in the different veins in the immediate neighbourhood, and, by pressure, pus exuded from the open cut mouths. The uterus appeared healthy, with the exception of being softer and more flabby to the feel.

Old and recent marks of inflammation were discovered in almost every viscus of the body. This patient had never been pregnant.

CASE II.—A well-marked case of phlegmasia dolens came under my observation in the spring of 1833, after an abortion, the pregnancy advanced about three months. She had for some years previously suffered severely, during the menstrual period, with considerable pain in the left inferior extremity, and accompanied, prior to the catamenia appearing, with great pain and fulness of the veins of the same limb. Her health had been declining apace for some months. Phlegmasia dolens became fully developed in the evening of the second day after the abortion. The pain was so excruciating, that the patient could neither move the limb, nor suffer it to be touched. She remained between forty and fifty hours without stirring or speaking, unless roused. The treatment consisted almost solely of a liberal use of cordials, with powerful sedatives, to abate the pain. She recovered, but the limb had not regained its natural appearance by the ensuing autumn. The swollen, flabby, putty-white appearance, with a bluish tint, and exquisitely tender to the least impression made on the thigh over the direction of the great

vessels, well marked the characteristic features of the disease.

I regret exceedingly it has not been in my power to procure a preserved specimen after an abortion, but the fact is they are very rare, and which I think may be accounted for from the debility induced after an abortion, which is not to that extent as after parturition; hence recovery generally follows. Among the numerous specimens, beautifully illustrating the pathology of phlegmasia dolens, in the possession of Dr. Lee, there is not one, I believe, after an abortion.

CASE III.—A poor girl, scarcely twenty years of age, became pregnant by her lover, who soon after deserted her. She concealed the fact from her parents; and as she had suffered from difficult menstruation, and it had also been irregular for some years, she willingly took, by their advice, powerful emmenagogues, such as aloes, pennyroyal, steel wine, hiera-picra,—remedies well known to, and in the reach of, every old woman, in the hope of their procuring abortion. However, they proved of no avail, but rather tended, in conjunction with her dejected mind, to produce great debility. I delivered her at the full period of utero-gestation. After delivery, which was natural, her weakness, pain and numbness in the right inferior extremity, greatly increased. By opiates and cordials these threatening symptoms were checked. The second week after confinement her friends were compelled to change their residence, and the fatigue induced by transporting her from one place to another dreadfully increased the debility, and shortly after phlegmasia supervened. From her constitution being naturally good, and herself young, she recovered, but the affected limb remained almost useless for many months. Stimulants internally, hot fomentations, wrapping the limb in flannel, followed by frictions, and bandaging it, were the principal means adopted for the recovery of the limb.

I might attempt to occupy the pages of this Journal, by relating numerous other cases that have occurred and proved fatal, after either condition, could I conceive for a moment that they would prove either advantageous to our subject, or the members of the profession, as little dependance, I am fully aware, are placed on them in general, owing to many points being omitted in order that they may be brief; in proof of my assertions, I could cite upwards of twenty fatal cases of phlegmasia dolens which have been published, where the condition of the menstrual function, prior to the attack, has not been once referred to. However, perhaps I may be permitted to allude, in a few words as possible, to those cases which occur occasionally almost within the first month after parturition, and after the effects of that process have been apparently recovered from, in persons of pretty tolerably robust con-

stitutions, where they have been suddenly seized with high febrile symptoms, debility ensuing quickly ushering in the disease under consideration, and not unfrequently proving fatal.

It has been difficult to account satisfactorily for these cases, and I think it will still remain so, unless we admit that it owes its first origin to a diseased state of menstruation, and before the disease can be brought into action, the system must labour under general debility, its exciting cause. In conclusion, it remains for me to acknowledge the assistance I have received from the valuable labours of Dr. Lee and Dr. D. Davis, and to express my thanks to you, gentlemen, for your kindness in giving insertion to this communication.

Reviews.

The Dublin Journal of Medical and Chemical Sciences, including the Latest Discoveries in Medicine, &c. No. XIX.

THE Dublin Journal is as replete as ever with original and interesting communications. The first article is "Pathological Remarks on Chronic Abscesses, by Dr. M'Dowell." The Doctor prefaces his remarks with the subsequent observations. "Chronic diseases of the bones, or of the joints, frequently terminate fatally, by inducing acute inflammation of the serous membranes, or by the formation of purulent deposits, in some of the important organs, occurring, as in the brain, lungs, liver, &c, or purulent infiltration of the cellular membrane may result from long continued, or severe, irritation of a mucous membrane, as of the bladder."

Three cases are presented as exemplifications. One will suffice to develop the view which the Doctor takes.

"CASE II.—Cornelius O'Neil, aged 36, admitted April 6th, 1832, with prominences of the seventh and eighth dorsal vertebræ; lower down, tenderness upon pressure, incipient transverse sulcus of the abdominal parietes; impaired power of the lower extremities; occasional pains shooting from the loins to the lower limb; muscles flabby; cough and slight mucous expectoration; frequent and troublesome flatulence of the abdomen; impaired appetite; perspirations, &c. Previous history: six years and a half since laboured under syphilis, for which he was salivated several times; about the same period pains commenced in the middle and lower part of the dorsal vertebræ, with weakness in the limbs; a year since he was thrown from a horse, and this accident was followed by an increase of pain; he has been blistered eight times; cauterization was applied on either side of the diseased vertebræ, and the bowels carefully regulated.

"May 8th. Pain now extends along the

margin of the false ribs towards the sternum; increased weakness; numbness and coldness of the lower extremities; dyspeptic symptoms are also worse. During the succeeding four or five months blisters and tartar-ematic ointment were applied without relief. He left the hospital, and was not seen until April 4th, 1833, when the following report was made:—
 ‘Increased stiffness of the back; shooting pain from the back down the right thigh; swelling of the right knee-joint, with contraction of the leg, from slight synovitis; tense and lymphatic abdomen; appetite failing; bowels regular; urine passed freely. Three months subsequently a lumbar abscess became developed on the right side, small but tense, ointment of the hydriodate of potash was liberally applied to the tumour, and for one month there was much relief, the tumour appeared to lessen considerably, but again increased, and, on examination, the abscess was found to have extended to the inguinal region, forming a swelling internal and inferior to the anterior superior spinous process of the ilium; debility and numbness of the limbs increased; tumours and spine rather tender; bowels generally confined; suffered lately from influenza, and since that time cough, with expectoration, is more troublesome than formerly. I meditated puncturing the abscess, according to Mr. Abernethy’s plan, but the general want of success following this operation, when the vertebrae are diseased, deterred me; a blister was applied to the tumour in the loins, and the surface afterwards dressed with savine ointment; this caused so much local uneasiness, with irritability of the stomach, that the unguentum resinæ, and subsequently poultices, were applied to the blistered surface.

“Dec. 5th. Tongue white and furred; ardent thirst; constant vomiting; distended abdomen; tympanitic; not tender on pressure; pulse 130, and soft. Pills of calomel and opium; effervescing draughts, and an enema in the evening.

“6th. Insomnia; nausea constant, and severe retchings; hiccough; severe headach; pulse 120, feeble; cephalalgia; thirst continues; bowels free; urine high coloured; dyspnoea; pain referred to the region of the diaphragm; mucous rattle; had profuse perspiration during the night; sunken look; prostration of strength. A mustard cataplasm was applied to the epigastrium; thirty drops of laudanum in an enema, and the following directed:

“R. Mist. camph. ℥vj.
 Ætheris sulphurici, ℥jss.
 Sp. ammoniæ arom. ℥jss.
 Tinct. opii, ℥xl.
 Sumat coch. ampl. duo 4tâ horâ.

“7th. The sinapism did not act; bowels free; urine nearly of the colour of blood; cessation of vomiting; occasional singultus; pulse very rapid, upwards of 144, and still feeble, though less so than yesterday; profuse perspirations; respiration 24 in a minute, and

jerking; occasional cough, with mucous râle, continues; headach; looks still more depressed. Sinapisms directed to the feet.

“8th. No sleep last night; some raving; tremors; other symptoms as yesterday, more debility.

Vesicatorium inter scapulas.

Sinapisms repeated, an emollient enema, and four ounces of wine with water.

“9th. Constant moaning and raving during the night; pulse rapid and thready; eyes glazed; insatiable thirst; mucous râle louder and more diffused over the chest. Died this day.

“On examination, there was found an enormous flatulent distension of the cœcum; the colon was doubled on itself below the right lobe of the liver, and descended very low to form the transverse arch; the vermiform appendix was united by old and firm adhesions to the cœcum; the right kidney was displaced and pushed forward by the psoas abscess; liver soft, flaccid, and pale.

“Thorax.—On the right side intense and recent pleuritis, with purulent effusion; the inflammation was peculiarly acute below, where lymph in large quantity was poured out between the pericardium and lung, and between the latter and the diaphragm; the left lung throughout was firmly connected to the parietes of the chest by old adhesions; bronchitis; two ounces of serum in the pericardium.

“The pleuritis, in this case, was overlooked; no pain in the chest was ever complained of; uneasiness was referred to the epigastrium; and the constant vomiting led me to believe that the cause of irritation was below the diaphragm, and that it was connected with irritation of the sac of the abscess, consequent upon the application of the blister to the lumbar tumour.”

The next communication is by Dr. Churchill, entitled “Researches on Instrumental Delivery,” and was read before the College of Physicians. The author commences by congratulating the profession on the comparative infrequency of instrumental operations to that in earlier times, when the philosophy of parturition was less understood, and when the powers of nature in effecting delivery, even in very bad cases, was not properly estimated.

The cases requiring manual, or rather the employment of instruments, are divided into three classes. In the two first, the measures to be employed the author imagines are clearly indicated. In the one case you have a sufficiently capacious pelvis; the outlet is free, and the soft parts are in a condition to readily admit of the expulsion of the fœtus: but there is a want or a deficiency of uterine contraction. Such a condition may arise from a defective vigour of the whole system; the uterus, therefore, participating; or it may be dependent upon a partial paralysis—a want of power of the uterus alone; in such a case artificial means,

after the accustomed delay, are demanded. Here the use of the ergot of rye shall be resorted to. In this case the author conceives that "the substitution of an extractive force for the expulsive effort is manifestly all that is required." The conclusion is too abruptly arrived at. The uterus is, unquestionably, the most powerful and the most desirable agent for expelling the child, and those means which can be devised for restoring its full activity when impaired, are assuredly preferable to any extractive force applied by instruments.

In the *second class*, where there is a disproportion between the size of the foetal head and the capacity of the maternal pelvis, or where the pelvis is considerably distorted, artificial means are imperatively demanded for the extraction of the child. This condition forms a *class* of its own. Ergot of rye could not effect the object, no kind of forceps could be employed with safety, or with the probability of success. To craniotomy we must resort.

In the *third class*, when the woman has arrived at the full period of utero-gestation, and when any of the following contingencies arise, such as when "fever or inflammation sets in, or where there is great exhaustion; where similar effects result from the malpresentation or malposition of the head, or where the child is hydrocephalic, in cases of fainting, hæmorrhage, or convulsions; where tumours obstruct the passage, or where its calibre is diminished by deformity of the pelvis, but not to any great degree, or where the child is supposed to be dead;" for these cases Dr. Churchill enters into a long discussion on the comparative virtues of the *forceps* and *crotchet*.

We next notice a table of the relative number of forceps and crotchet cases. "Among British practitioners, the number of operations compared with the number of cases, are 167 in 29,195, or about 1 in 174. In 16,499 cases, there were 53 requiring the forceps, or about 1 in 311, and 64 requiring the crotchet, or about 1 in 257.

"In the estimates given by French authors we have 59,908 cases and 262 operations, or about $1\frac{1}{2}$ in 238. The forceps were used 221 times, or nearly in the proportion of 1 to 271. There were 41 crotchet cases, or about 1 in 1461. The relative frequency of the two operations is almost one crotchet case to five forceps cases." In Germany, the forceps cases are $1\frac{1}{2}$ in 67, and the crotchet cases about 1 in 752.

The object of these elaborate investigations is to enable us to form an estimate of the two instruments. And the author concludes, as many have done before him, that the forceps is the preferable instrument, and that in no case where the forceps can be practically employed, is the crotchet to be used. In using the crotchet we inevitably sacrificed the child, and it appears very naturally that the mortality of the mothers is greater, as we notice that it is. But the cases in which one or the other instrument is to be employed are so dissimilar,

that we conceive no difficulty could arise in distinguishing the most appropriate one. The Doctor rambles a little, he is not always clear and definite; the details, however, are worthy of record, and they support the conclusions he has made, that the forceps is the preferable instrument, and that the mortality is smaller from either, in skilful hands, than the majority of individuals might suppose.

"Cases and Observations," by Dr. Christian, forms the next article. A case of spitting of blood is first recorded, in which it appeared doubtful whether it proceeded from the lungs or stomach; it was found to have proceeded from the sockets of two of the inferior incisor teeth which had probably been swallowed and again ejected.

The next is one of *monomania* occurring in a young girl, apparently depending upon suppressed catamenia, uterine congestion, as remedies directed to that organ removed the malady.

A remarkable case of congenital malformation of the iris is noticed by Dr. Osborne, which was clearly hereditary. Practical Observations on Fever, by Dr. Little. On the Theory of Sleep is a well written and ingenious criticism of Macnish's theory, by Mr. Carmichael. History of a unique case of Heart Disease, by Dr. Hanna, is curious. Remarks on the Pathology of Abscesses on the surface of the Cheek, by Dr. Frorien, translated, with the ordinary concluding subjects, occupy this most valuable journal.

Descriptive Catalogue of the Preparations in the Museum of the Royal College of Surgeons in Ireland. By JOHN HOUSTON, M.D., &c., Curator of the Museum, &c. Vol. I. (Anatomy.) Hodges and Smith. October. pp. 250.

Next to possessing a good museum, is a catalogue which shall indicate the situation of each preparation, and describe its character and its nature. It would seem that the College of Surgeons in Ireland passed a praiseworthy regulation, directing that a catalogue of the various preparations in its museum should be made and published, with the object of facilitating the study of anatomy and diseased conditions. The present is the first volume, comprising a description of all the specimens which illustrate healthy anatomy; a second volume, representing diseased structures, is soon to appear. It is not merely a catalogue containing dry details of specimens, of unconnected descriptions, but a lucid and philosophical arrangement of healthy structure, as manifested in all the beings of creation; the classification is very similar to that adopted by Cuvier in his "Leçons d'Anatomie Comparée," there being but a trifling difference. It may perhaps be said by an Englishman, "of what utility is the Dublin College Museum to us, we cannot see the preparations,"—but the Irishman can, we answer, and it is for this

plain reason that a full notice shall be given of the work,—as fully, however, as our hebdomadal will permit; and, in doing so, we shall make long, or at any rate numerous, extracts, such as will induce, in the minds of Dublin men, a zest for examining the Museum, and afford interest to others, and may perhaps show them what preparations are curious, yet simple and easily prepared. The preparations are divided into those belonging to the “Organs of Assimilation,” “of Circulation,” “of Respiration,” “of Sense,” “of Locomotion and Prehension,” “Urinary and Genital Organs,” “Monsters,” “Animals.”

“A. a. 177. The tongue of an alligator (*lacerta allig.*). Its surface is smooth, without papillæ, and covered with a firm opaque cuticle. The nerves, exhibited on the lower surface, are remarkably large, and decussate in the mesian line,—their branches passing to supply the sides of the organ opposite to those at which the trunks are placed. The late Mr. Skeleton, who noticed this fact in 1822, has remarked, ‘that it is the most clear case of nervous decussation he is acquainted with.—J. S.—P. 18.

“A. a. 248. The head of a salmon prepared to show the teeth. It may serve as an example of a fish with teeth in every situation in which teeth are found in this class of animals, viz. :—the jaws, palate, vomer, tongue, branchiæ, and pharynx.—J. H.—P. 22.

“A. b. 325. The stomach of a rat in a healthy state: the cardiac end is covered internally with cuticle; the pyloric is highly vascular and villous: a circular defined line marks the distinction between them.—J. S.—P. 23.

“A. b. 353. The stomach of a full grown goat (*capra hircus*), inflated and dried: this preparation affords an instructive example of a truly ruminating stomach; all the cavities and apertures are shown.—J. S.—P. 24.

“A. b. 354. The stomach of a foetal calf inflated and varnished (*bos taurus*): the preparation shows the groove which at this period of life leads from the œsophagus to the fourth or digestive stomach, for the direct conveyance of the milk into that cavity.—J. H.—P. 25.

“A. b. 437. The crop of an old pigeon taken a few days after the young which it hatched had escaped from their shells: by a comparison with the other (No. 436), it may be seen that the walls have become thick, and the glands enlarged: the secretion from the glands, when first examined, was in such abundance as to fill the crop: it resembles the curd of milk, and is given as food to the young pigeon while still tender, and unable to digest seeds. In preparation 438, this nutritious matter is shown transferred into the crop of the young animal.—J. H.—P. 28.

“A. b. 621. The posterior half of a leech which lived and moved for a period of ten months after being separated from the anterior part of the body. The animal after abstract-

ing blood from a patient was accidentally broken into two during the process of emptying the stomach of the engorged blood; the posterior half being found alive, after some days, in the basin into which it had been accidentally thrown, it was taken up and preserved carefully in a glass of water; for some time the water became tinged with the blood which oozed from its lacerated body, but by degrees a perfect cicatrisation was accomplished, without leaving a trace of the smallest aperture by which either nutriment could have been imbibed or fluids discharged; and, nevertheless, the nutrition and powers of motion of the animal continued in perfect and full operation. It increased considerably in size, and moved about the cicatrised extremity of its body with great agility in water while sticking by the sucker of its tail to the inside of the glass in which it was preserved. This leech was given to me by Mr. Roche shortly after the accident which deprived one half of its body of life, and was preserved in my possession during the remainder of its demi-existence. Its death arose from neglect in not changing sufficiently often the water.—J. H.—P. 35.

“A. c. 741. The cœcum of a rabbit (*cuniculus lepus*), dried and cut open, to show the beautiful spiral valve which winds along its cavity from one end to the other.—J. S.—P. 40.

“B. b. 226. The heart of a chameleon (*lacerta chameleon*). The heart is composed of two auricles and one ventricle. The auricles are large and placed at the upper part of the ventricles; and to the side of each a large sinus is connected which receives the blood of the body and tongue; the two veins which return the blood from the erectile tongue discharge it directly into this peculiar reservoir when suddenly abstracted from the organ during the subsidence of that congestion by which its elongation, and protusion in catching insects, is accomplished. The ventricle is triangular and muscular. The lungs are two in number, and extend on each side from the neck to the sacrum; the cells of which they are formed are polygonal; they are small near the neck, gradually become larger towards the middle of the lung, and at the posterior end have almost disappeared in the formation of one large membranous vesicle.—J. H.—P. 72.

“B. b. 231. The heart of a frog-fish (*lophius piscatorius*). This preparation gives an accurate notion of the construction of the heart in fish. There is a single auricle and single ventricle whose sole use is that of propelling the corporeal venous blood into the lungs, to be rendered arterial by the influence of the water in which these organs are naturally immersed. The auricle is situated on the dorsal side of the ventricle, is of a square shape, muscular in structure, and much fasciculated on its internal surface. At its back part the common opening from the veins, guarded by a double semilunar valve, may be

seen; and anteriorly the passage which conducts the blood into the ventricle is exhibited. This passage is wide, and furnished with two semilunar valves, which give the opening a slit-like form. The mechanism of this valve is demonstrated very plainly in the preparation. The ventricle forms an irregular square; its fleshy structure is vastly more abundant than that of the auricle; it is smooth on the external surface, and presents many fleshy columns internally. Nearly in the centre of its dorsal wall, the opening leading from the auricle is placed; that which forms the mouth of the pulmonary artery is situated at its anterior border. The commencement of the pulmonary artery is surrounded by a thick muscular structure of a pyramidal shape, termed the pedicle; the internal surface of the pedicle exhibits numerous muscular fasciculi arranged in a longitudinal direction; three continuous semilunar valves guard the opening leading from the ventricle into the pedicle of the pulmonary artery.—J. H.—P. 74.

“B. b. 274. The heart of a crab (*cancer mænas*). It consists of a single ventricle without auricles for receiving the blood from the bronchial veins, and propelling it through the arterial system into the body. It is a simple systematic heart, analogous in office to the systematic compartments in mammalia and birds. In its cavity, which is laid open, numerous columns of muscular fibres may be seen crossing and mixing with each other in every direction.—J. H.—P. 78.

“B. c. 335. This preparation shows irregularities in both the right thyroid arteries. The inferior thyroid takes origin from the arteria innominata and runs up to the thyroid gland, lying in its ascent on the anterior part of the trachea, and where it must have been wounded had the operation of tracheotomy been performed on the individual the subject of such irregularity. The superior thyroid arises as usual from the external carotid, but crosses the centre of the crico-thyroid membrane, lying precisely on the spot where the knife is introduced in laryngotomy.—J. H.—P. 80.

“B. c. 342. A successful injection of the arteries and veins of the hand with quicksilver. The capillaries of the surface are shown to great advantage; the tops of the fingers, especially under the nails, are completely covered with small convoluted vessels, and all the large sub-cutaneous trunks are fully distended with the quicksilver.

“The hand of a young emaciated subject is the best fitted for making a preparation of this kind. This following will be found a satisfactory mode of proceeding. A very tight ligature should be bound around the fore-arm a little below the wrist, with compresses under it before and behind on the interosseous spaces, for the purpose of stopping up completely all passage through the vessels; a tube, capable of holding a considerable column of quicksilver, should then be

introduced and secured in the radial artery below the ligature, with the least possible injury to any of the small vessels. The quicksilver is now to be poured into the tube, held slantingly, when it will flow with great rapidity and fill every artery and vein in the hand; the injection may be known to have succeeded when the veins on the dorsum appear moderately filled. Hot water should now be poured on the hand so as to loosen the cuticle and nails, which are to be carefully scraped off, in order that the subsequent drying of the cutis and the exhibition of the subcutaneous vessels may be complete. The hand should now be exposed to a current of dry air, with the tube still in the radial artery, as it may be necessary from time to time to add a little more quicksilver in case any of the vessels appear empty, which may be readily ascertained in the progress of drying, as the vessels become every day more and more visible. As soon as the hand is completely dry, amputation of it may be performed above the wrist in the site of the ligature, and a cement applied to the cut surface to prevent the exudation of quicksilver, which will be likely to occur from the cancellated extremities of the bones or some small openings in their vicinity. Sealing-wax is a convenient cement, and will sufficiently answer the purpose. The whole is now to be immersed in clear spirits of turpentine, by the operation of which the dried flesh is not only preserved but rendered transparent, and the quicksilver in the vessels made to appear of a brilliant yellow colour, altogether making one of the most beautiful and instructive exhibitions of vascular anastomosis that the anatomist is capable of producing.—J. H.—P. 81.

“D. a. 104. The brain of a dog-fish (*squalus caniculus*) in situ. The preparation shows the small size of the brain in comparison with that of the cranium in which it is lodged; the pia mater is well marked, and surrounds the brain closely; the place of the arachnoid membrane is occupied by a glairy gelatinous liquor, which is present in great abundance, filling all parts of the cavity unoccupied by cerebral matter; the dura mater lines the interior of the skull.—J. H.—P. 105.

“F. c. 310. A rare form of human placenta. It consists of two separate and nearly equal parts which were connected to the opposite sides of the uterus, and the vessels of which, after a course of three inches, joined into one chord for the nutrition of a single foetus. The preparation was presented by the late Dr. Tukey.—J. H.—P. 139.

“G. a. 3. A perfect double foetus. There are two heads, two sets of limbs, and two bodies united, face to face, by the heart. The heart is common to both, the aorta gives branches equally to both, and the veins from both enter into the same auricle. One diaphragm serves for both. The preparation is

very old, and its history unknown.—J. S.—P. 147.

This is a work we would recommend the council of every medical or philosophical institution to purchase, its price is *exceedingly low*, and it contains a description, as is obvious from the extracts we have given, not only of the preparations in the Dublin College Museum, but it tells what preparations are necessary to illustrate animal mechanism in its simplicity and its complications. Not only to these bodies would we restrict it, but recommend it to every surgeon who feels any interest in anatomical research. The production reflects great credit on Dr. Houston; if this had been his first and only one it would have alone stamped him as a philosophical anatomist.

FOREIGN MEDICAL LITERATURE.

REVIEW OF THE GERMAN JOURNALS.

Extraordinary Case of St. Vitus's Dance—Poisoning by Ammonia—Remarks on the Mechanism of Labour—Spheno-siphon, an Instrument for Incipient Labour—Curious Case of Abortion.

FANNY CHRISTENS, aged about fourteen, is the daughter of healthy parents, and enjoyed good health throughout her infancy. During the course of the Autumn of 1829 she became very ill; every evening, and at the same hour, her extremities were agitated by involuntary motions. After having been under the care of several physicians, she was at length attended by the author of the present detail. Her state and appearance were thus:—She was excessively emaciated; and for more than a year had been subject to convulsive motions from 7 in the morning until 11 at night. Her arms and legs were constantly agitated by quick and brief jerks; her hands were closed; her head in incessant motion; the eyes open and motionless, the pupil scarcely conscious of the light; the muscles of the face did not contract; her respiration was now short, now tranquil, or interrupted by sighing and coughing. Her pulse was slightly accelerated, and the region which extends from the point of the heart to the spleen was affected by the touch. The temperature of her body was natural; the urine abundant; the defecation occurred only every three or four days. She had never voided worms; and her nourishment consisted wholly of liquids, such as milk or mucilaginous drinks. Throughout the whole duration of the access she continued insensible, a circumstance, and the only one which can raise a doubt as to the nature of her malady resembling St. Vitus's dance more than any other affection.

About the middle of January, 1832, great surprise was excited by a noise (proceeding, seemingly, from the bed of the invalid), which resembled that of striking with the back of the hand against the bedstead, or scratching

it with the nails. For a length of time it was believed that the invalid made the noise herself, but on repeatedly raising the coverlid at the moment that belief subsided. Suspicion, however, of some trick on the part of the parents or attendants induced the author of this tract to take every possible means of discovering it. The situation of the bed was frequently changed; the invalid placed on a chair in the middle of the room, or transported into another; still the noises continued, and always seemed to proceed from the objects nearest to her. If seated on a chair, for example, they proceeded from the chair; her lips, meantime, were motionless; neither were the sounds caused by the articulations. Twenty-two physicians of Hamburg unite with the author in testimony of this fact.

It was on the 12th of January that these extraordinary noises commenced; they increased in intensity for some time, then diminished in power, and towards the middle of March ceased altogether. They had never been heard whilst the invalid was sleeping; they often arose, however, during the night, and might be provoked by striking against the bedstead; also, they would keep time to the music of the voice, or to an organ playing in the street. Moreover, these whimsical sounds would change their nature, and seem like the falling of rain, or of drops of water into a decanter, or the harsh grating sound of a saw; at which the invalid would appear frightened, and say, they were making her coffin.

It is, however, beyond question, that she had the power to produce these sounds, for having been one day thwarted in some wish, she exclaimed, "Well, then, you shall have a glorious racket for your pains!" and consequently an intolerable scratching and knocking ensued. Still she would never confess either that she produced the noises or knew how they were produced. One circumstance was very remarkable:—at the approach of a male, even of her own little brother of six years old, the noises increased in intensity; or by pointing the fingers towards the epigastrium; but if thus pointing they were enveloped in silk the sounds immediately ceased. The power of the stethoscope was tried in vain.

Towards the Spring her convulsions became less violent. In August a spontaneous and somewhat abundant salivation ensued; her appetite and sleep returned; and after a residence of some months in the country, her courses commenced, and thus completed the restoration of her health, which has ever since remained perfect.

Case of Poison by Ammonia.

A young lady, twenty years of age, had been suffering some days from diarrhoea, and, on the 17th of November, she ejected her breakfast. Her mother gave her a teaspoonful of a liquid which she believed to be that which had been recommended by a neighbour as a specific in maladies of the heart. The young

lady complained of its detestable taste, but was compelled to swallow it, and scarcely had she done so, when she fell prostrate in excessive agony. It was ammonia she had taken, bought for another purpose, and thus inadvertently given. I arrived within half an hour of the time, and found that she had been taking a great quantity of milk. She was very pale, and her countenance showed her acute sufferings. The tongue, the pharynx, and the mouth were whitish, and covered with blisters. Between three modes of treatment, each having its peculiar advantage, I hesitated:—the evacuation of the poison by emetic—its neutralisation by vinegar diluted with water—and its conversion into liniment by oil. I decided on the last mode of treatment, and administered spoonful after spoonful of Provence oil, and had the satisfaction of seeing, each time, a diminution of pain. I then ordered an emulsion of eight ounces of the oil of almonds with the mucilage of gum Arabic, and a small quantity of laurel water and nitrate of potass; at the same time the patient was to take alternately a mucilaginous drink and a small quantity of vinegar.

Her pulse lowered every instant, but the pains in the abdomen were succeeded by acute præcordial anxiety, and followed by excessive vomiting, whitish, ropy, and smarting to the touch, emitting a penetrating odour like ammoniacal liniment. Upon further examination, the matter evacuated was found to consist of milk, mucus, and ammonia, combined with oil. Warm drinks favoured the vomiting, which at length consisted of pure mucus. To this succeeded evacuation by stool, which caused an acute sensation of smarting in the anus.

By the evening the vomiting and diarrhoea had ceased, but there had been previous shivering with great suffering in the epigastric region; leeches were applied and the other remedies continued. During the night of the 18th the patient suffered much; she complained especially of difficulty in breathing, and of great pain over the whole surface of the œsophagus; her skin was dry. Except the nitrate of potass, the same remedies had been continued. The fever became high towards the following evening, the pulse small and frequent, the oppression excessive. I immediately took twelve ounces of blood from her, and applied a blister to the upper region of the abdomen; this was succeeded by a more tranquil night; but the blister being very painful, I caused it to be dressed with simple cerate. Pulse 85, and the skin moist. She had a good night on the 20th; the following day profuse perspiration, with diminution of the præcordial and epigastric suffering; nothing remained but the pain in the abdomen. After a night less tranquil than the last, her menses came on, being fifteen days before their regular time. From that hour she began to recover rapidly; her pulse descended to 70; the morbid symptoms disappeared successively,

with the exception of two—she could neither speak nor move. Nevertheless, on the 25th she quitted her bed, and soon after completely recovered.

Manceuvres in Parturition.

“*Corporis integritatem sufficit medicus, amissam resiliuit, non recuperandam demulcet, dignus adeo, qui veri sapientis titulo superbiat,*” says Rœderer, in his discourse *De Artis Obstetricæ Præstantiâ*. And, certainly, medicine is an essentially practical art, the sole object of which being the relief of suffering humanity; therefore is it that by the study of the sick alone it can progress, and that the student can be initiated in the healing art; that of midwifery is the most difficult to teach publicly, and there still exists many universities in which there is not a clinic of this kind. This is not the place to enter into details on the subject of such an establishment. Consult rather the memoir of M. Siebold on the establishment of the clinic of midwifery at Berlin in 1829, a memoir which contains every information on the subject. That which the author would here particularly dwell upon, is the course which the professor would take in giving his instructions. The pupil ought to study the woman during her pregnancy, during her delivery, and after it. During pregnancy the touch is the most important point, for however advanced the student may be in medical science, he must often have recourse to the touch to determine a question of diagnostics, insoluble by any other means. But as it is indispensably necessary that the pupil should be enabled during his experiments to give their result to the professor, that his errors, if any, should be corrected, so it is advisable for such purpose, that they should be alone with the woman to be examined, and thus with each pupil. True, this method of proceeding would occupy a great deal of time, but it would be time well bestowed. The rest of the examination should be confided to the pupil who is to deliver the woman, and to digest in writing a complete detail of the matter, with all her former pregnancies, if any. The professor will also enlighten his pupils as to the use of the speculum, and exercise them in the use of the stethoscope in discovering the place of insertion of the placenta.

As soon as the pains come on, recourse should again be had to the touch, and the pupils in turn should examine the state of the vagina and uterus. And here arises a question of great import, in a case of unnatural labour, which of the two ought to officiate, the professor or the pupil? As accoucheurs must be formed and had, the answer seems simple enough; the pupil should take advantage of such a case to improve his science. How is it in the medical and chirurgical schools? A pupil prescribes a medicine, but it is not given until the professor has decided upon its propriety and utility. Again, having operated many times on the dead, the pupil is

required to try his skill on the living, but the professor is at hand with his advice and assistance, and can take his instrument from him if he use it not properly. Far different is the case in the practice of midwifery. Suppose a case of eversion entrusted to a pupil of little intelligence and less skill, how can it be known whether he acts as the difficulties of the case require? And if the professor operate himself, what advantage is that to the pupil? He cannot follow the professor's hand into the uterus; he can, at most, only form an idea of his muscular power, and of the strong contraction of the uterus. The best alternative seems to be to initiate beginners into all cases of difficult labour gradually.

The Spheno-Siphon, a New Instrument to Cause Premature Artificial Delivery.

BY DR. SCHAHENBURG, OF CASSEL.

All the accoucheurs in Europe are at present engaged in considering the subject of premature artificial delivery, called also forced delivery. Opinions are divided; a great number of practitioners prefer encephalotomy. Reissiger has collected seventy-four cases, in which infants have been safely brought into the world by forced delivery; the number may be now increased to two hundred and fifty, or three hundred. Baudelocque, Capuron, Dubois, Gardien, and Sue in France; and Nisbet and Leighton in England, have constantly rejected the proceeding; and Piringier, in a little work, entitled *Tractatus de Partu Præmature Artificiali*. Viennæ, 1826, makes very weighty objections to it.

Of all the methods hitherto employed to provoke premature labour, that of Nægele's is the most conformable to the means used by nature herself, gentle frictions of the abdomen, warm baths, and light titillations of the vagina are the principal modes by which he causes the uterus to contract itself. And they are preferable to the introduction of prepared sponge, or to the rupture of the amnios; this latter process is often impossible when the placenta is attached to the vagina, and the introduction of sponge is sometimes long and difficult. The process employed by Conquest and Hamilton, if not the most gentle, is at least the most expeditious.

The author of this memoir submits to accoucheurs a plan, which has not yet received the sanction of experience, but the innocuity of which, in case of non-success, cannot be doubted. He proposes to employ an instrument, which he names *spheno-siphon*. The length of the barrel of this syringe is four inches and a half, its diameter ten lines, the bore seven lines, the pipe a quarter of an inch at its extremity, which is pierced with two holes, and its diameter is one line, tied tightly round the base of the pipe; the instrument has a bend analogous to that of the vagina's. After having cleared the rectum and the bladder, the abdomen is bandaged sufficiently tight, and the patient is placed on her back.

Guided on the fingers, the pipe is then gently introduced into the neck of the womb, and the piston pressed inward until resistance is felt, it is then screwed, and the instrument fastened to the bandage around the abdomen. The following day the piston is still further advanced inward; and, finally, on the third day it is made to penetrate to the end of the barrel, and consequently the neck of the womb is dilated one inch, the contractions will then begin, if they have not already begun. It is impossible to anticipate any opinion as to the value of this instrument, the idea of which appears to have been taken from the *dilatateur* of Ducamp: experience can alone decide.

Extraordinary Case of Abortion.

A woman, who had already gone through four labours safely, was seized, towards the fourth month of her fifth pregnancy, with a violent pain in the rectum, accompanied with a discharge from the anus of foetid matter, sometimes coming with the excrement, and sometimes not. The pain quickly extended below the pubes, and at length to the inguinal region, on which she could not bear the slightest pressure. Her urine was scarce and acid, and the constipation obstinate, a watery mucus flowed from the genitals, the vagina was dry and burning, and the neck of it a little open. An antiphlogistic treatment caused all these symptoms to disappear, except the pain in the groin, which yielded only to the repeated application of leeches. After a respite of two months the pains of labour came on, and she was delivered of a fœtus of five months, well formed, and presenting no traces of putrefaction. On a careful examination of the fœtus, M. Malin found, under the skin of the left shoulder, a fish bone, half an inch long, and easily recognised as the tail of a small fish; on the upper part of the thigh he found another. During the whole of her pregnancy the woman was in the habit of eating a great deal of fish, and so voraciously as to swallow bones and all; these adhering to the folds of the rectum caused the perforation with suppuration of the recto-vaginal partition, and penetrated thus to the uterus and the fœtus. The woman completely recovered.

PAROCHIAL MEDICAL REMUNERATION.

WE have lately spent a few moments in conning over the Report of the Poor Law Commissioners, and, while so doing, have been not a little surprised at the different degrees of medical remuneration offered by some parishes to their doctors; for instance, the parish of Lenham, in Kent, which contains about 6,523 acres, and 2,197 souls, has no fixed stipend, but the annual expense for medical advice, &c. is about 70*l.*; while at Horsham, a parish of 9,300 acres, and about 5,105 souls, the same amount only is paid to the medical

officer, so that the latter parish, the extent of which is about one-third more than that of the former, and the population more than twice the amount, pays no more to its surgeon than Lenham. This is not a solitary example, it may be paralleled in any part of the country; its source may be readily traced to the vile and infamous system of contracting at so much per head, or taking a parish, as is too often the case, solely with the view of making a practice. At Gamlingay, in Cambridgeshire, the salary is 5*l.*, the extent 4,080 acres, population 1,319; at Pulborough, in Sussex, salary 5*l.* 10*s.*, extent 5,424 acres, population 1,979; at Kirdford, in the same county, which is a much more extensive parish, comprising 16,000 acres, with a population of 1,623 persons, the salary is only 5*l.*, while at Eastbourn, also in Sussex, 5*l.* is paid to the surgeon, the parish have an extent of only 4,597 acres, with a population of 2,726.

ON THE PROPERTIES OF TOBACCO, BY MR. ATKINSON.

THE common prejudice in favour of tobacco is almost coeval with its first introduction into Europe. When the Spaniards conquered Mexico, they found it in use among the inhabitants, but solely as a stupifying medicine, of which the idolatrous priests took advantage in certain circumstances, when, for example, they wished to appear divinely inspired. For this purpose they inhaled the fumes, which threw them into a high degree of mental excitement, and thus favoured the establishment and currency of their impostures. Nicot, a French Ambassador in Portugal, was the first who, about the year 1560, made tobacco into snuff, and presented it to Catherine de Medicis, from whom it got the name of *Poudre de la Reine*, by which it was known. In Persia, the people became so passionately devoted to this pulverised substance, that the sopher felt himself bound to prohibit its use under pain of death, or, at least, the amputation of the noses of the incorrigibles. James the First wrote a fierce book against tobacco*, and the thunders

* This work was published in 1603, and called "Counterblaste to Tobacco," in which the king says, "It is a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black stinking fume thereof nearest resembling the horrible Stygian smoke of the pit that is bottomless."

Camden says, Sir Francis Drake introduced tobacco into England in 1585, and it immediately "began to grow into very general use. A great many persons, some from luxury, and others from their health, being wont to draw in the strong-smelling smoke with insatiable greediness through an earthen tube, and then to puff it forth again through their nostrils; so that tobacco taverns (*tabernæ tabaceanæ*)

of the Vatican were hurled against its pernicious use. These fulminations and prohibitions, however, do not seem to have had any other effect than stimulating the people to a more copious employment of the drug. My French friend recommends the fumes strongly in asphyxia from submersion, but few would wish to qualify themselves in this way for the full benefit it would then produce. Tobacco is distinguished by a pungent, bitter, and acrid taste, no great recommendation to popular favour. But those who want an excuse for smoking, allege that it acts pleasantly on the bowels, relieves dyspepsia, and is an agreeable substitute for pills and draughts. Dram-drinking might be as easily defended. Drams are, perhaps, not more pernicious. Those who, as the poet sings—

Exhale mundungus, ill-perfuming scent,
diffuse generally a filthier odour around them than the bibbers of cordials. Many, indeed, have had recourse to snuff to disguise some other effluvia, as garlic is understood to take off the smell of onions. In these matters, however, *de gustibus non est disputandum*, and there may be no great danger in a man smoking "to the top of his bent," only let it be known that it is a gratuitous indulgence, a thing of choice, and unwarranted by any existing necessity. Nasty things may be fashionable as well as sweet ones, and a filthy enjoyment may be mistaken for one of elegance and propriety. The author before me, who inveighs thus vituperatively against this "*coutume mauvaise*," declares that he has the good of his fellow-creatures at heart, and believes tobacco to be a most pernicious drug. He therefore dissuades them from using it, either at convivial parties or quietly at home, whether in the form of smoke, quid, or snuff, since it has no medicinal power upon the organs of the amateur whatever. Imagination assuredly goes a great way in every thing, and even tobacco has its supporters. But the smoker, whether of pipe, hookah, or cigar, may be induced to consider that nervous irritability and febrile inconvenience very often close the fumigating career, and he may at last think proper to pause before he injures the important function of his system irrecoverably. "Blind mortals!" says my emphatic friend, "know ye not that the drug which stupifies the senses, affects the muscular fibre, and produces a sedative effect, nervousness, stupidity, inanition, paralysis, and, finally, death."—*India Journal of Medical Sciences.*

are now as generally kept in all our towns as wine-houses or beer-houses."

It appears from a note in the "Criminal Trials," vol. i. p. 361, that in 1600 the French Ambassador, in his despatches, represented the peers, on the trial of the Earl of Essex and Southampton, as smoking tobacco copiously, while they deliberated on their verdict.

Reports of Societies.

MEDICO-BOTANICAL SOCIETY.

February 24th, 1835.

Dr. CHOWNE, M.D., in the Chair.

Dr. E. D. MORRIS, F.R.S.E., and F.C.P.E., was admitted a Fellow of the Society.

In accordance with the announcement at the last meeting of this Society, Mr. Hanham explained the manner in which he prepared his Herbaria. The process was exceedingly simple:—the plant to be preserved must be perfectly fresh; the under surface of the leaves is covered with mucilage, and applied to the paper, to which it is caused to adhere by moderate pressure. The mucilage must be very pure and fresh; no chemical means are employed.

Mr. Everitt, the Professor of Chemistry, previous to entering on the subject (Atropine) he had allotted for this evening's lecture, made a few remarks on the preservation of plants in gases. Humboldt had stated, that plants which were put into any gas would vegetate fungi, but Mr. Everitt had in his possession, and exhibited to the Society, vegetables which had been in bottle seven or eight years retaining their natural form and flexibility, and in a proper state for the knife of the dissector: he considered, therefore, that this plan of preserving vegetable specimens would be especially available in those cases where it is desirable to submit rare plants to the eye of the experienced and scientific botanist. The specimens exhibited were preserved severally in the vapour of alcohol and of æther, in hydrogen, nitrogen, and in carbonic acid gas.

Mr. Everitt then mentioned that the specimen of Atropine which had been transmitted to the Society by Earl Stanhope from Professor Geiger, was not large enough for him to try experiments with, and he must therefore be contented with translating the observations of the Professor. It was discovered by Mein, Geiger, and Hesse: it exists on all parts of the *Atropa Belladonna*, but is principally obtained from the fresh dried root. The Atropine (of which a specimen was sent round) crystallises in white, transparent, silky, vesicular prisms; is heavier than water, and remains unaltered by the air. It does not possess any odour, but if it be at all impure, there is an evident difference in the crystals, and it has an highly offensive smell like that of hyoscyamine or daturine. The taste of the atropine is offensively bitter, giving a tingling sensation with a metallic after taste. It is highly poisonous, causing contractions of the œsophagus, with dryness of the mouth, vertigo, and headache, followed by dilatation of the pupils. It is stronger than either hyoscyamine or daturine; one thousandth part will affect the pupil, and a larger quantity will dilate it for ten or twelve minutes. In two cats to whom it was administered it produced champing and frothing at the mouth, with convulsive action of the head, previous to its exerting its influence

on the pupil. It has an alkaline reaction on vegetable colours, and the effect is not evanescent. It melts at the temperature of 212°. When the heat is higher, it becomes partly decomposed and partly volatilised. The celebrated German chemist, Liebig, has carefully analysed it, and gives the following as its composition:—7.83 hydrogen, 70.98 carbon, 4.85 nitrogen, and 16.36 oxygen. It is apt to undergo spontaneous decomposition, which is much facilitated by an elevated temperature and the presence of moisture. It is readily acted on by acids and alkalis. Two hundred parts of cold, and fifty-four of hot, water dissolve one part of atropine. Although there is such a disproportion in the quantity dissolved by the hot menstruum, the salt is not precipitated when the solvent has cooled. The finest crystals of this salt are obtained by boiling it in water at 212° for a long time, when thirty parts of the liquid will take up one of the salt, the surplus being deposited crystallising beautifully as the water cools. It has not any affinity for the fixed organic alkalis; the addition of tincture of iodine causes a yellow colour. If the infusion of galls, or gallic acid, be added to a moderately concentrated solution of atropine, a curious result takes place,—the fluid becomes gelatinous; and even when the solution of the salt is considerably diluted, a jelly-like deposit occurs. It may be observed, that those substances which exert such chemical action on the poison generally serve as antidotes, and it may be exemplified by the effects of albumen on the bi-chloride of mercury. Professor Thenard took a solution of the oxy-muriate of mercury by mistake for eau sucrée; he immediately had recourse to the white of eggs, and his life was saved.

Alcohol is a ready solvent of atropine; an ounce and a half of the spirit will dissolve an ounce of the salt, but, notwithstanding, crystals cannot be obtained by evaporating the spirit, the residue being an uncrystallisable, gelatinous mass; water is the best solvent, when it is desirable to obtain crystals. Æther is a much worse medium for its solution; twenty-five parts of cold and six of hot sulphuric æther will dissolve one part only of atropine.

The mode of preparing this salt according to Professor Geiger is extremely complicated, and it would answer no good purpose to go into it at length. If the leaves of the *atropa belladonna* are employed, great difficulty will be experienced in getting rid of the colouring matter, indeed this forms one of the difficulties in obtaining all proximate principles; it will be obviated or, at least, lessened by using the fresh-dried root, coarsely powdered. This is exhausted by strong spirit, containing at least 90 per cent. of real alcohol; to this alcoholic solution or tincture hydrate of potash is added, and the mixture filtered, and saturated with sulphuric acid; half the spirit is then to be distilled off, and these processes of filtration, distillation, and precipitation, are to be repeated five or six times, until the salt is obtained pure. All this is to be carried on

with great despatch, and without too much heat, as the atropine is very liable to be decomposed.

The salt unites with acids and alkalis, but the compound bodies thus formed have not yet been sufficiently examined, for an accurate opinion to be given concerning their properties.

It was announced that at the next meeting a paper by Dr. Hamilton, of Plymouth, on some Mexican plants, would be read.

There were on the table various articles of the *materia medica* belonging to Mr. Battley, on which Dr. Sigmond made some observations. There were fine specimens of the colocynt, squill, opium, aloes, calumba, cardamoms, cantharis, camphor, colchicum, conium, castor, rheum, cinchona, sarsaparilla, cinnamon, cassia, ipecacuana, gum ammoniacum in mass and in tears, belladonna, aconitum, and finally the physic nut of Africa, with a specimen of its expressed oil. The value of this exhibition was much enhanced by the addition of specimens of the same drugs as they are commonly met with in commerce; the great difference between the two was very perceptible, and would of itself constitute a most cogent reason for a revival of the laws concerning the drug trade, and indicate most strongly the necessity of placing druggists under the superintendence of properly qualified individuals. When speaking about the specimens of opium on the table, Dr. Sigmond took occasion to allude to the adulterations to which it is liable, and mentioned that it is not unfrequently mixed with *cow dung*. He added that he had been informed by Mr. Horne, that, having occasion for some powdered opium to prepare the acetum opii sedativum, he procured some at a respectable house, but found it almost inert, and, on examination, he ascertained that the acetate of morphia had been previously removed. The African physic-nut was stated to be obtained from the *Jatropha Curcas*, a tree of the natural order Euphorbiacæ; it is considered a purgative in the dose of a nut and a half. Dr. Morris stated that it acted equally in the form of emulsion.

COLLEGE OF PHYSICIANS.—In answer to a question from Mr. Wakley, the Chancellor of the Exchequer replied "that he had not received the regulations of the College of Physicians, to which he had adverted on a former day, but he expected they would be sanctioned. In order to become a licentiate, it was necessary to have a university degree, and to have resided a certain time at a university. The course intended to be pursued for the future, he believed, was to dispense with a residence at a university, and to have a certain form of examination, and a certain attendance at medical schools. Any person who should, therefore, pass his examination would be at liberty to act as a licentiate. Those, therefore, who might study at the universities would, in future, have no advantage over any other who might be competent to pass an examination.

THE

London Medical and Surgical Journal.

Saturday, March 7, 1835.

REMARKS ON THE DISUNION AMONG
MEDICAL PRACTITIONERS.

IN these times, when the cordial union of all ranks of medical practitioners is so desirable, and even essential to gain their just rights, if there is one subject more calculated than another to rouse the interest and arrest the attention of medical men, in whatever branch of the profession they practise, it is the low state of mutual courtesy and union among them. Professors of an enlightened science, the object of which is to distribute that blessing, which is beyond price, to mankind, to alleviate disease, and combat its Prorean inflictions of pain and anguish; nevertheless, we are found too frequently at variance each with the other, and expressing our mutual dissent, with respect to professional views, with a rancour and virulence (particularly some of our Journals) one should think better fitted to any other than that profession which consults so much the happiness and welfare of society.

To such as are not engaged in the profession, or initiated in the mysteries and miseries with which it is conversant, who look on it as a career of honourable exertion, calculated to awaken the finer feelings of our nature, and give birth to the most refined sentiments, it must appear in the last degree strange, that generous emulation and liberality of conduct are not so frequently the accompaniments of medical rivalry as envy and asperity. That to the many of us it seems easier to denounce than to applaud, more congenial, to borrow a metaphor from our own art, to wound than to heal, a brother practitioner.

In private practice, we much fear that the feelings, to which we have alluded, too often sully and spot the polished surface we should, as the curators of their health, present to those, who narrowly watch our movements and weigh our motives, and are prepared to measure out a severe criticism on them when detected to be of a selfish and ungenerous character, such as to stain the inward uprightness and kindly policy which it behoves us to exercise towards each other, and which in the end would be most beneficial. That there are many highly honourable exceptions to this general imputation must be confessed, but enough, and too much, of acrimony exists among us to poison our social intercourse, hold us up to public animadversion, and warrant the few observations on the subject which we are about to lay before our readers.

As the light of comparison often pierces the cloud, which another mode of appealing to the reason might in vain essay to penetrate, we may, in passing, be permitted to say a few words on the treatment of each other found among those following the professions ranking immediately above ours. Looking at the clergy, cultivating an analogous but infinitely more sublime function, we perceive that their reciprocal habits are marked throughout by a kindness and urbanity, which allow not of petty carping and personal vituperation. They may, they do, differ among themselves; orthodox may clash with evangelical, but their expression of dissent does not descend into coarseness, or individual invective (at least, if such happen now and then, it is but an exception to the general rule, and discountenanced). Their disputes are argued without rudely violating the amenities of social life, and a classical halo is shed over the whole, which we should rejoice

to see communicating some portion of its lustre to our kindred science. This liberality, this absence of personal strife, arises, it is fair to presume, in a certain measure, from the forbearance inculcated by their sacred function; but we must be permitted to add, that in no less a degree does it spring from those habits of reflection and self-command, which a well disciplined and liberal education induces. We would not, however, here, we repeat it, be understood to imply that there are not many, indeed a numerous portion, of the medical profession, who possess a fair average education, and many of them a superior acquaintance with classic lore, but **THEY** are not the majority to whom these strictures are addressed and applied. Nor let these, forming the mass of our body as they do, take umbrage at what we now, bound by a love of truth, say, for among them there is valuable mental ore, though unwashed and unfiltered,—there are intellectual gems, rough and deficient of splendour, only because they have not undergone the metamorphosing hand of the artisan,—there are minds which shine forth, darkened and eclipsed only from the want of a liberal education.

Let us now descend a step on the ladder of professions: we shall behold the lawyers, though at apparent issue, in actual concert. The *esprit de corps* animates them, and their differences of opinion, although openly expressed, allude not, except in rare instances, to the *personal* talent, or capability, of their antagonist; and even when they adopt this course their language does not plunge into the mire of scurrility. Their declamation, though loud, (and who has not heard it?) is employed in arguing and dissecting the matter, not the manner or accidental circumstances of their opponent. Their writers are not in arms against each other, and against the repu-

tation and respectability of their profession. Their pleaders, though engaged in warm debate, pay that homage to public opinion, and courtesy one to another, which prevent the miserable system of reviling and *personal* abuse, which seems to have blinded and led captive, in numerous instances, disputants on medical subjects. Inferior practitioners in the law do not endeavour to stultify their calling before the public, they reflect that

“ Corsaires contre corsaires
Ne font pas leurs affaires,”

and eschew that acerbity of contradiction in their professional collisions, which often signalises the less wary cultivators of physic. Among the lawyers there are no periodicals, which, under the pretence of recording the passing events happening in their body, seize upon them for the purpose of maligning private character, or making them a stepping-stone, whence to spring from what concerns the furtherance of science to what is personally abusive, can answer no other end than the gratification of bad passions and worse principles.

The examples afforded by professors of divinity, or law, then, have not taught us to wage a fratricidal warfare,—have not put into the hands of some of our Journalists the envenomed shaft, wherewith to stab private fame, or deal a coward blow at the back which is turned,—have not taught them to use the rhetoric of Billingsgate, and, in their controversies and remarks, to brandish the *oyster-knife* of criticism instead of its keen-edged razor, or to inflict (our brethren of the *Lancet* will understand us) a *contused*, in preference to an *incised*, wound. No! some other fountain, whence the evil hath run its muddy course, must be sought.

Scandal has a deep well, and too many

among us unfortunately love to draw her bitter waters mantling with the defects of our neighbours, but this frailty *we* participate in common with the rest of mankind. We must go farther to seek the *especial* cause of our jarring state. We need not go far. Folly and ignorance, individual interest, and sordid gain, lift up their heads, and extend their claws to gripe the lion's share in our squabbles. Again we repeat, the want of that education which fertilises the brain and softens the manners, *has been* more egregiously wanting among us than in any other profession. “ *Hinc illæ lachrymæ.*” Hence the divisions and subdivisions, the jealousies, the petty cavillings disturbing the harmony of our medical camp. Hence its would-be champions, and self-constituted instructors, wielding the medical press, presume on the lack of intelligence among the many, and violate justice too often with impunity, deeming the breadth of a hair a sufficient boundary between them and a breach of the law. The non-medical press, on the other hand, viewing these assaults on private character mingled with matter professing other and more praiseworthy objects, and astonished at our eternal bickerings, which have even become proverbial, considers us beneath its notice, and sets us down as a body unilluminated with a soul. And this silent contempt we undergo because we *will not* agree together, because each surveys his neighbour with an eye of hostile rivalry, not of liberal competition, because each is ready to assail and criticise, instead of treating with tenderness, his fellow practitioners' motives and conduct.

Is this a state of things which should be allowed to exist longer among men skilled in their profession, dealing out each day of their lives an immense amount of good to the community they serve—

aye, and serve as no other description of benefactors do? for who gratuitously gives away the sweat of his brow and brain—who toils in the work of charity like the medical practitioner? Who confers such solid but unpaid-for benefits upon the public? or where shall we search for a parallel to his unremunerated labour? Will the lawyer forego his fee, or the schoolmaster teach for nothing? Will the tradesman part with his goods, or even Holy Mother Church grant her blessing, be it at christening or funeral, without demanding an equivalent?—No! they each and all require the stimulus of gain; and our body stands alone, proudly and honourably in this respect. We are, without a figure, the Samaritans who go about doing good where hope of reward—at least on earth—there is none, or it is indefinitely distant. And shall we, who are capable of and perform these works, worthy of the gratitude of all around us, erect the standard of intestine warfare, and encourage an undermining schism within ourselves? Shall we, deserving of the admiration and respect of society, to which we render such signal and unrequited services, provoke its contempt by insanelly setting our faces against and harassing each other? Forbid it, common sense! forbid it, that policy, which should join within the links of amity those who are embarked in the same cause! Let us hope that better things are on the eve of completion, that a nobler spirit of mutual feeling is about to animate us, and convert that rope of sand, which now deceitfully encircles, into a chain of lasting force to bind us together.

One word more with respect to those detestable attacks upon private character, which in every honest mind can excite no other feeling but indignation and abhorrence: we shall ever, as we have hitherto

done, repudiate them. If the shaft of ridicule—and heavy disputes are often best settled by it—must be sped to effect a worthy purpose, we guarantee that its head shall be pointed and sharpened by skilful hands. No archer of our corps shall take a bungling aim, or pierce the person where the opinion is the object; and when opinions must be attacked, they shall be met openly and fairly, and the matter be one of intellectual, not personal, conflict. Once for all, then, we wipe our pen of all personalities, unless egregiously provoked and pressed by the law of retaliation, and promise to conduct our Journal, so that we may say,—*Hic murus aheneus esto, nil conscire sibi, nulla pallescere culpa.*

GIN PALACES AND THEIR BANEFUL EFFECTS.

“Salus populi suprema lex.”

On Tuesday evening in the House of Commons Sir J. Beckett presented a petition from certain inhabitants of Leeds, praying for the further consideration of the legislature with respect to these superbiest pests. Mr. Baines seconded the prayer, which was further supported by Sir G. Strickland, Mr. Robinson, and Colonel Evans, and finally ordered to be laid on the table.

In looking over these evils, which from time to time lift up their heads to infest society, the acute observer cannot help fixing his attention on those gaudy receptacles for the sale of disguised poisons; very appropriately named gin palaces. Pass through which street he may in any part of the town, his eyes are sure to alight on one of these poison shops, painted and stuccoed in palatial style, bedizened with a flaring lamp, but, like the fabled upas tree, shedding from its rank interior the causes of disease and death to thou-

sands. No one who has not witnessed the crowds which continually resort to worship the leaden-hued demon, who presides within these temples of drunkenness and ruin, can imagine their extent, especially in the working districts. It would appear, from the vast quantities of the fiery composition, nick-named gin, which they dispose of to dram-drinkers of every description, that the appetite of the lower orders for their ancient nut-brown beverage is fast declining, and will be soon totally extinguished by its trashy rival.

Let any body enter one of these showy Pandemoniums, and survey the countenances of the congregation there assembled. The inebriated eye and sallow cheek will meet his view on all sides, proving the magnitude of the evil. At night, more especially, intoxication, having gratified its thirsty propensity, stalks forth primed for violence and ready for crime. Vice and folly hold their court within them, and are rendered trebly vicious and foolish by the copious libations furnished from the vile tubs which, as it were, form the battery of these villainous holds. So thickly are these traps to catch the roaming drunkard interspersed in all directions, that, half reeling and irresolute as he wends his way staggering homewards, at every turn they salute his vision, and break his sober resolves; he takes them in rotation, and finishes his guzzling march by an introduction into the station-house or into a ditch.

Formerly the little humble public houses, which were convenient to certain of his Majesty's lieges for refreshment, presented none of the allurements now blazing forth from their stately rivals; but now, even those finding that their occupation was gone, stolen away, they also metamorphosed their outward modesty, and

adopted the Jezebel front of their painted neighbours. "Othello's occupation's gone," few of the sober looking structures remain; and if a person who had been absent from London for the last ten or fifteen years were now to enter it, he might look in vain for the plain brown-looking brick and mortar surface of his old acquaintances; in lieu of them he would be enlightened with the effigies of a staring, huge-windowed, and lofty edifice, calculated, not for the accommodation of wayfarers, as originally intended, but for their destruction, by the sale of adulterated liquors.

How much the health and morals of the lower classes in the metropolis are deteriorated by the consumption of the stuff vended in these wholesale laboratories of liquid fire, the medical practitioner knows full well. Delirium tremens, indigestion, and an endless train of diseased liver and other viscera, claim this as their cause, while the immense excitement induced by throwing large quantities of ardent spirit, (or some compound which sets analysis at defiance,) into the stomach, leads to results mischievous in the highest degree to morality and decency. Were malt liquor the intoxicating agent, its effects would not be so pernicious. Sleepiness would deaden the active force, and incline to peace instead of outrage.

It will be inquired "is there no remedy for this crying evil?" We fear not, unless people can be persuaded to their own good, sometimes a very difficult thing to accomplish. The Government might, seeing that the proprietors of these splendid Bacchanalia realise vast profit from the concoction and brewing of their commodity, lay upon their backs the whip of taxation a little more heavily. Their licence might be held under a fine, computed with reference to their annual re-

ceipts, instead of according to their rent, which now is the case. It may be urged, that the liquor is sufficiently taxed already, but we answer they have, within their den, a transmuting talisman, which trebles whatever quantity enters it. Let them be taxed accordingly.

In the last Parliament Sir A. Agnew proposed, that the interior of all places for the sale of liquors should be thrown open, so that their orgies being exposed to view the more tender of reputation, and less abandoned bibbers might be restrained, if not reclaimed. We are not, however, of opinion, that this sort of opening medicine would be tolerated in the present times, and therefore earnestly trust that the Government, in their wisdom, will hit upon some plan of abating this growing nuisance, which it needs little acumen to see is

“foul in many a fold,
Voluminous and vast,—a serpent armed
With mortal sting.”

Foreign Medicine.

HÔPITAL DE LA CHARITÉ.

Clinic of M. Corbin.

GENTLEMEN,—Phlegmonous erysipelas is frequently complicated with gangrene, but the latter condition arises in various ways. Mortification of the skin is generally consecutive to destruction of the subcutaneous cellular tissue, and in this case we can detect, before gangrene takes place, some signs of fluctuation, and if the disease be abandoned to its course ulceration occurs, and shreds of the cellular tissue, mingled with pus, are discharged, the external integuments are destroyed, and the muscles or aponeuroses are laid bare. In such instances free incisions, if made at an early period of the disease, may prevent mortification, and, if at a later stage, they may limit its extension. The parts do not assume a black appearance, nor is there any gangrenous odour. In other and less complicated cases, to which alone ought to be applied the term gangrenous erysipelas, the gangrene commences in the skin, and is preceded by the appearance of phlyctenæ, or by the black and livid tint and peculiar odour of

this class of diseases. Here incisions have always appeared useless, and where they have been made, the edges of the wounds suffered more from gangrene than the other parts.

Erysipelas of this last mentioned species is usually very severe; it is characterised from the very commencement by prostration of strength, and is almost always fatal. Such cases are fortunately rare; thus in erysipelas of the limbs, in nine cases out of ten gangrene takes place after the suppuration and destruction of the cellular tissue. We frequently see pure phlegmonous erysipelas arise in the scrotum, and a part of it destroyed by mortification. Upon the face and hairy scalp gangrenous erysipelas (confining the term to its proper limit) is rarely seen; and when it does occur, the skin always mortifies after suppuration of the subcutaneous cellular tissue. This fact is illustrated by the following case, which is also interesting in some other respects.

“A man, forty-eight years of age, having drunk very hard, received a sabre wound, three inches long, upon the left parietal bone. He was admitted the next day into the Hôtel Dieu. Attempts had already been made to promote the immediate reunion of the divided parts, although, from the appearance of the wound, they were not likely to succeed. The adhesive plasters which had been employed were removed, and the lips of the wound were separated; the bone was not exposed, but at the anterior part of the wound, which approached the coronal suture, the fibres of the aponeurosis of the occipito-frontalis muscle were denuded. The edges of the wound were laid very gently together, and, as erysipelas was at that time very common, cold lotions were ordered, and twenty leeches applied to the neck.

“On the 4th, the face was rather swollen.

“5th. Slight erysipelatous appearance on the right eye; cold lotions continued; blister to the neck. The erysipelas continued to extend, but before it had reached its highest degree of severity, it disappeared entirely.

“On the 9th, there was seen at the bottom of the wound a yellow looking substance, which was found to be the aponeurosis already mortified. The patient complained of being dull and heavy; and of a sensation of weight in the head, which was so painful that he could scarcely bear to rest upon his pillow.

“11th. Manifest fluctuation at the back part of the scalp, and extensive separation of the scalp from the bones. The abscess was opened, and a small quantity of pus discharged. Much relief followed, and the following days no remarkable symptoms occurred. Mortification of the aponeurosis still continued, and shreds of yellow looking fibres were from time to time separated from it. The patient still continued drowsy, but could obtain no sound sleep; inflammation of the brain and its membranes, with violent fever, convulsions, and great prostration of strength

soon came on, and the patient sank, and died in a few days.

“ Upon dissection, the lungs were found engorged with blood, and appearances of chronic gastro-enteritic inflammation were detected. Upon the outside and upper part of the cranium, the cellular tissue between the bones and the aponeurosis was entirely destroyed. The surface of the bones was covered with a sanious discharge, and exfoliation of them had commenced. The pia mater was inflamed and thickened, and between this membrane and the arachnoid there was an effusion of pus. This case is remarkable, not only on account of the progress of the erysipelatous inflammation, but it shows, also, that a wound on the head may remain open although the bones are not denuded. If the occipito-frontal aponeurosis is exposed it exfoliates like a tendon, and often in a very gradual manner.

“ Cases of erysipelas are occasionally seen which appear to be intermediate between the superficial and phlegmonous forms of the disease. In such instances there is but little swelling, no collection of matter to any great extent under the skin, but here and there small insulated abscesses. In a patient named Spainvielle, after an attack of erysipelas of the face and scalp, several small abscesses formed in the neck, behind the ears, and upon the cranium. In another patient, after a similar attack, accompanied with enormous swelling of the face and scalp, an abscess formed upon the right upper eyelid, and numerous small collections of matter, from the size of a filbert to that of a cherry-stone, also formed upon the scalp. These abscesses remained for a long time very hard; some of them disappeared spontaneously, and others were opened, and healthy pus was discharged from them.

“ External erysipelas frequently disappears from one part, while at the same time the disease attacks a more or less distant region of the body. Thus, in a man named Tessier, who was admitted into the Hôtel Dieu, erysipelas of the leg and foot disappeared when the face became the seat of the disease, and the parts originally affected were again attacked when the face recovered. Erysipelas also frequently exercises a revulsive influence upon internal diseases. A young man was attacked with acute pulmonary catarrh; he was bled frequently but without decided advantage; he was much oppressed, skin hot, pulse hard and quick. He was attacked with erysipelas of the nose, which quickly extended to the face and scalp. The feverish symptoms increased, and he became delirious; leeches were applied to the neck, and he was bled in the foot. In a few days the erysipelas disappeared. From the time that the external inflammation appeared, and while it lasted, the patient breathed freely; there was less expectoration, and, in fact, there was every reason to believe that the bronchitic affection had ceased. It might at first have been presumed that this diminution of the symptoms depended as much

upon the repeated abstractions of blood as upon any revulsive influence of the external inflammation; but no sooner had the erysipelas ceased than the cough, oppressed breathing, and other indications of bronchitis, reappeared with increased severity, and it was again necessary to have recourse to venesection.

“ Phlegmonous erysipelas of the lower extremities, of the most severe kinds, is very often produced by the slightest external causes, either from excoriations, slight wounds, the neglect of old ulcers, or by applying stimulating remedies to them; and sometimes simple contusions are sufficient to produce the disease; as in a man named Wivel, among other similar instances, who died in three days of erysipelas, in consequence of falling upon his knee. Sometimes no external cause can be detected.

“ When we oppose to these cases numerous instances of other patients placed in the same circumstances, or even affected during the same season with much more severe external lesions; and in whom, notwithstanding, no erysipelatous disease is developed, we must presume that, in the former there existed some peculiar disposition, or, to speak less vaguely, a lesion of some important organ, and particularly of the abdominal viscera. The idea is confirmed when we detect a red and dry tongue, headach, sensibility in the epigastrium, an inflated state of the belly, diarrhoea, or enlargement of the liver; but the results of dissection in eleven fatal cases of erysipelas affords the most satisfactory proof of the accuracy of this opinion.

“ In the first, a patient named Tupin, the mucous membrane of the stomach was nearly of a black colour, and softened throughout the region of the pylorus: the commencement of the duodenum exhibited the same appearances. Almost the whole of the small intestines, to within an inch above the cæcum, was of a deep violet colour. In the large intestines, some of the glands were hypertrophied, and appeared like small pustules.

“ In the second case (a patient named Plüg), the stomach was highly coloured in different parts, with patches of a red and brown appearance; the colon, throughout its whole extent, of a deep red colour.

“ Case 3rd. Duranton: appearances of chronic inflammation of the stomach and duodenum, characterised by reddish tubercles; rectum distended with fæces.

“ Case 4th. Leerbier: peritoneum of a red colour, with serum. Stomach, patches of brown and black colour. Duodenum, a circular ulceration about the size of half-a-crown.

“ Case 5th. Schier: mucous membrane of the stomach softened, and of a dark slate colour; the submucous cellular tissue of the duodenum deeply injected; red patches in the cæcum.

“ Case 6th. Wivel: the mucous membrane of the stomach and duodenum softened, and of a grey colour throughout nearly its whole extent.

“Case 7th. Debry: In the stomach, near the cardiac orifice, was found a smooth hollow tumour, the size of a small rennet apple, containing bloody serum. The whole surface of the stomach of a dark colour.

“Case 8th. Tronnet: the mucous membrane of the stomach softened, and generally pale; small red spots on the great curvature.

“Case 9th. Lefebvre: liver studded with grey tubercles; spleen softened, and of a large size.

Case 10th. Lambert: the mucous membrane of the stomach of a deep slate colour.

“Case 11th. Delgatta: Biliary calculi were found.

“Thus, with the exception of the last two cases, in which no striking morbid appearances were detected, in all the bodies there were considerable lesions of the abdominal organs. If we compare these results with our observations during life, it will be difficult to deny that most cases of erysipelas depend upon some internal cause. If such be the most frequent cause of erysipelatous diseases, it may appear singular to attribute to these maladies a decided influence over the progress of internal inflammations. This influence is, however, very evident, and not more astonishing than other revulsions effected by nature or art. No fact is better ascertained than this kind of antagonism, which is established, in certain cases, between the skin and internal mucous membranes, and especially the gastrointestinal; hence the use of purgatives and emetics in the treatment of erysipelas. But these means should only be employed when the digestive powers are healthy, or at least when there is simple obstruction of the stomach and bowels. In similar instances to those above described, we must, it is true, act principally upon the abdominal organs, but antiphlogistic and emollient remedies can alone be employed with safety.”

Sketch of the Subjects of the two Prizes offered by the Société de Pharmacie, at Paris.

AMONG the substances belonging to the organic kingdom, starch is, without contradiction, one of those which have induced the greatest number of experiments. This substance, so abundant in nature, constitutes, as is well known, the alimentary principle of a great number of vegetables.

It also supplies us with various products by the modifications it undergoes, which daily appear to be assuming greater importance, and one of the most remarkable of these is sugar, which it can form by several processes; this sugar has been the subject of great labour and application for several years, but the causes of its formation are, as yet, obscure, and a great deal must yet be done to enlighten us on that subject.

In order to arrive at this end, the Society of Pharmacy proposes to chemists the questions which will be soon stated.

It would be too long, and *malapropos*, to give here a sketch of the chemical and microscopic operations which have been undertaken in order to demonstrate the structure of starch, or to make known its nature, and the different modifications it undergoes in passing to the state of gum and of saccharine matter.

When Kirckhoff discovered the remarkable property of the saccharification of starch by the intervention of sulphuric acid and water, he extended his experiments to other bodies, and he recognised the existence of a similar property in gluten, but all endeavours to explain this saccharine change were almost useless.

The experiments of Kirckhoff on the reaction of gluten and starch tend to make us presume that, in the germination of the cerealia, sugar is formed at the expense of this substance; nevertheless this hypothesis will not explain what takes place when, in order to convert fecula into alcohol, fermentation is produced by adding malt. These considerations induced M. Dubrunfaret to examine this question carefully, and, in an excellent essay, approved by the Central Society of Agriculture in 1823, he arrived at this conclusion, that malt acts on starch by reason of a particular property which the other cerealia have not, or only in a much less degree.

He endeavoured to discover to what principle this property belonged; he attributed it at first to hordeine, then to a matter which he called *soluble gluten*, and was thus the first to recognise that in malt the property of causing fermentation belongs to a substance soluble in water. It must be acknowledged that this explanation of the functions of malt with regard to starch, still leaves room for inquiry.

Latterly the labours of Messrs. Payen and Persoz have thrown considerable light upon this question; these chemists have extracted from malt a substance which they have found to possess the property of converting the amyaceous fecula into sugar, and they have given it the name of *diastase*; they state that this substance exists in the seeds of barley, wheat, &c., near the germs and not in the radicles, and that it is also found in potatoes after their germination, and near their points of insertion.

It is generally accompanied in these substances by an azotic matter, little soluble in water, and insoluble in alcohol, but coagulable at a temperature of from 65° to 75°. The matter to which they have given the name of *diastase*, is white, solid, amorphous, insoluble in concentrated alcohol, soluble in water and weak alcohol; it has not any peculiar taste, is neutral, but, if moist, will soon become acid on contact with water; it throws down a white precipitate with the subacetate of lead; when brought into contact with fecula at the temperature of from 65° to 76°, it rapidly detaches what are called the integuments, and soon offers a substance which has the appearance of gum, and constitutes *dextrine*.

If the action of heat be continued a long while, but always within the limits mentioned, a saccharine matter is obtained, capable of fermentation, analogous to that produced by sulphuric acid according to the process of Kirckhoff, except that the saccharification appears to be only partial, and is scarcely more than a fourth or a third of the weight of the starch; let us add, also, that temperature has great influence on this property of the diastase, for when heated to ebullition it has not any influence on the fecula.

The action of the diastase is certainly the more remarkable, since the smallest quantity suffices to act very rapidly on the amylaceous fecula; 1-2000th part, for instance, added to a thick solution of starch, heated to from 65° to 70°, will render the latter fluid, and change it successively into a kind of gum, and sugar.

To what is this energetic action to be attributed? Messrs. Payen and Persoz assign to the diastase only a kind of mechanic action, saying that, under the influence of water, it alters the order of the elements of the internal parts in the fecula, produces two soluble substances, and then favours their escape from the integument.

We may thus perceive that, although the substance in malt which acts on the amylaceous fecula is now known, nothing positive has yet been ascertained in regard to the explanation of the facts, for we are yet ignorant of the real nature of the diastase, and upon what principles in the starch it exerts its action. We are also ignorant if the diastase is a pure immediate principle, or the result of a reunion of complex bodies. These are the questions that, in the actual state of our knowledge, we have a right to propose, consequently, with due regard to the importance of the subject, as well as in a scientific point of view, as also its uses and applications, the Society proposes the following questions.

1st. What is the chemical nature of the diastase?

2nd. How does it act on starch in the modifications it produces?

The prize will be a gold medal of the value of 1,500 francs.

Second Subject for a Prize.

The analysis of an organic substance ought not to be confined to the separation of some insignificant salts, and gummy, extractive, and resinous matters, often very complicated; we must, when the substance will allow it, seek for those crystallisable, or, at least, pure principles, on which the most remarkable properties of the vegetable under analysis depend. The application of several of those already discovered in therapeutics, has been too successful not to induce us to seek in vegetables, acknowledged to be active, the causes of their actions on the animal economy. There are also some principles which do not appear to have previous existence, and which are only the result of the reaction of agents employed

for their extraction; in the actual condition of organic chemistry this is a point which the chemist ought to examine, in order to explain the causes of the formation of these new products.

Among the vegetable substances, the action of which is not doubtful, may be cited the foxglove (*digitalis purpurea*). Notwithstanding the experiments on this plant by Dulong d'Astafort, Haase, Planizza, Leroyer de Genève, Pauquy, and, recently, by Welding, there is much obscurity as to the real nature of the principle to which the properties of the digitalis are to be attributed. In order to ascertain definitively if there be a similar principle in existence, the Society proposes a prize of 500 francs for the essay which solves the following question:—

“Does there exist in the *digitalis purpurea* one or more immediate pure principles to which the medical properties of this plant can be attributed?”

The essays are to be written either in French or Latin, and must be sent to M. Robiquet, the Secrétaire Général of the Society, at the Ecole de Pharmacie, Rue de l'Arbaleté, at Paris, before 1st of January, 1836, at the latest.

The conditions for the prizes are the same as at all other societies. Foreigners are admissible as candidates.—*Journal de Pharmacie.*

Extra-Uterine Fœtation.

Professor Chaussier is of opinion that the development of the uterus and the secretion of the membrana decidua, are phenomena inseparable from extra-uterine pregnancy. Various observations have shown that this opinion is too exclusive, and the point may be now considered as settled, M. Gaussail having recently met with the uterus in its ordinary condition in a female gone her full term, with an extra-uterine fœtus.

ROYAL COLLEGE OF SURGEONS.

NAMES of Gentlemen who received Diplomas during the month of February, 1835:—

J. Thomas Harland, Ashbourne; M. David O'Connell, Kilmarnock; Rich. Inaffatt, Monaghan; Wm. Deakins, Bristol; R. Sturley Munn, Colchester; John Hawkins, Peckham, Surrey; Alexander Montgomery, Belfast; F. Hutton Hill, Bath; Jas. Rodgers Williams, London; Jas. Morris, Vincent-square, Westminster; Maurice Dyte, Houndsditch; Wm. Hibbert, A.; J. Nicholls Stevens, Penryn, Cornwall; C. Burton Dashwood, Yarmouth; Brook Fishley, London; Wm. Henry, Hull; Henry Davenport, Egham; Robert Barker, Rochdale; T. Lewen Marsden, Leeds; John Chapman, Stoneleigh, Warwick; John Baird, R.N.; H. P. Lewis Drew, Gower-street, London; T. Caverhill Jerdan, E. I.; H. Foote Ling, Stogumber; A. Ed. Webber, Wellington; R. Chas. Bidden; Chas. Lingen, Hereford; A. F. Carpenter, New Ross, Wexford.

APPOINTMENTS.

Naval.—Dr. Gilbert King, surgeon to the Victory, vice Chevers, supernannated. Mr. H. D. Shea, assistant-surgeon to the Swallow packet. Mr. Joseph M. Gorman, assistant-surgeon to the Speedy cutter. Mr. H. Fossman, assistant-surgeon to the Alban steamer.

Military.—Dr. Kidd, surgeon of Portsmouth Garrison, is appointed Inspector-General of Hospitals in Nova Scotia. Mr. Keaton, surgeon to the Royal Artillery at Portsmouth, is ordered on the medical staff in Canada.

DEATHS.

In Canada, Mr. Micajah Mabey, staff surgeon to the Forces. Mr. Samuel Brien, of Ballymena, surgeon. In Quebec, Assist. Surgeon Frederick Horatio Fisher, of the East India Company's service. Mr. Thomas Watts, of Macclesfield, late house-surgeon to the Stockport Infirmary. Surg. Barker, half-pay 11th Foot. Surgeon Denny, half-pay 62nd Foot. Mr. John Williams Cartledge, of Chesterfield, surgeon, by a fall from his phaeton. Dr. John Willison, of Dundee. Mr. Francis Daniel Mudd, of Gedding, near Bury St. Edmunds, surgeon.

Mr. R. J. Kane, Professor of Natural Philosophy to the Royal Dublin Society, and of Chemistry to Apothecaries' Hall, has retired from the co-editing of the Dublin Journal of Medical and Chemical Sciences. This work will in future be conducted by our talented contributors, Dr. Graves and Dr. Stokes, assisted by Mr. Porter.

WEEKLY BILL OF MORTALITY.

London, Tuesday, March 3rd, 1835.

Abscess	6	Inflammation of the	
Age and Debility	42	Bowels & Stomach	1
Apoplexy	4	Inflammation of the	
Asthma	18	Brain	3
Cancer	5	Inflammation of the	
Childbirth	3	Lungs and Pleura	9
Consumption	50	Insanity	2
Convulsions	35	Liver, Diseased	5
Croup	1	Measles	15
Dentition, or Teeth-		Mortification	3
ing	9	Paralysis	5
Dropsy	14	Rheumatism	1
Dropsy on the Brain	15	Small Pox	15
Dropsy on the Chest	1	Sore Throat & Quinsey	2
Erysipelas	3	Spasms	3
Fever	7	Thrush	1
Fever, Scarlet	7	Tumour	1
Gout	4	Unknown Causes	10
Hæmorrhage	1		
Hooping-Cough	27		
Inflammation	43	Stillborn	12

Buried, Males 184 Females 198 Total 392
Increase in Burials reported this week, 70.

BOOKS RECEIVED.

The Principles and Practice of Obstetric Medicine. By DR. DAVIES. Part XL. An invaluable work.
QUAIN'S Plates. Fasciculus XXIII.

CORRESPONDENTS.

Mr. Barnard's reply is unavoidably postponed until next week.

METEOROLOGICAL JOURNAL FOR FEBRUARY.

Days of Month.	Moon.	Thermom.		Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations			
		45	51	41	30.00	30.01	74	76	S.	S.	Fine	Fine	Fine
1		45	51	41	30.00	30.01	74	76	S.	S.	Fine	Fine	Fine
2		44	49	44	29.87	30.00	75	74	S.S.W.	W.	Cloudy	---	---
3		45	52	44	30.12	30.15	72	65	W.S.W.	S.W.	---	Cloudy	---
4		44	51	43	30.20	30.20	63	60	S.W.	S.W.	Fine	Fine	---
5	F Q	41	47	36	29.93	29.76	60	55	S.W.	W.	---	---	---
6		41	48	41	29.76	30.03	55	57	N.	W.S.W.	Cloudy	---	---
7		47	51	43	29.76	29.59	57	55	W.S.W.	S.S.W.	Fine	---	---
8		43	47	35	29.41	29.44	55	54	W.S.W.	W.S.W.	---	---	---
9		36	41	30	29.57	29.64	54	52	W.	W.S.W.	Cloudy	---	---
10		34	38	30	29.92	30.12	52	53	N.W.	N.N.W.	Fine	---	---
11		33	46	33	30.18	30.01	52	61	S.W.	S.S.W.	Cloudy	---	---
12		46	47	37	29.88	30.03	61	60	S.W.	W.N.W.	---	---	---
13	FM	39	47	39	30.06	29.93	60	60	W.	W.S.W.	Fine	---	---
14		44	51	44	29.71	29.53	60	62	S.W.	S.W.	Cloudy	Mist	---
15		49	52	42	29.50	29.94	62	57	W.S.W.	W.S.W.	Misty	Fine	---
16		42	47	41	29.24	29.43	57	57	W.	W.S.W.	Cloudy	Rain	---
17		42	47	41	29.46	29.50	57	57	W.	W.S.W.	---	Fine	---
18		44	47	41	29.23	29.22	57	57	S.	S.W.	---	Cloudy	Cloudy
19		44	49	39	29.21	29.91	51	58	S.W.	S. Variab.	---	Fine	Rain
20	L Q	33	47	35	29.99	28.91	58	57	S.W.	S.S.E.	Fine	Rain	---
21		36	47	36	29.02	28.23	57	56	S.W.	S.S.W.	---	Fine	Fine
22		42	49	42	29.51	28.42	56	57	S.W.	S.W.	---	---	---
23		41	50	31	29.97	28.37	57	52	S.W.	W.	Rain	---	---
24		37	48	37	29.51	28.64	52	56	S.W.	W.S.W.	Fine	Showry	Cloudy
25		45	50	43	29.37	28.15	56	59	S.	S.	Cloudy	Rain	Rain
26		43	50	40	29.00	28.01	59	55	S.W.	S.	---	Fine	---
27	N M	43	49	39	28.98	28.10	55	54	S.S.W.	S.S.W.	---	Rain	---
28		41	46	36	29.41	28.60	54	54	W.N.W.	W.S.W.	Fine	Fine	Fine

50, High Holborn.

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CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE II.

Case of Chronic Cough—Remarks on Bronchial Secretion—Expectoration never performed during Sleep—Effects of Catarrhal attacks frequently recurring—Account of remedies employed—Great power of Nitrate of Potash combined with Tartar Emetic, in subduing Inflammation—Observations on the Secretion of Air from the Mucous Membrane of the Intestines in certain Pulmonary Affections—Efficacy of Sulphur in Chronic Bronchitis—Sensation of Tickling which precedes Cough—Cough from Worms—Hysteric Cough—Pulmonary Irritation from a Syphilitic Taint—Pulmonary Irritation connected with a Gouty Diathesis—with a Scorbutic Habit—with Scrofula.

GENTLEMEN,—Allow me to direct your attention to-day to the case of J. Jowson in the chronic ward, labouring under an attack of exasperated chronic bronchitis, a disease which derives its chief importance from the circumstance of being exceedingly common. There is no morbid affection of the system more frequent or more general than chronic bronchitis, it is of every day occurrence in dispensary practice, it is one of those cases which you will be constantly called on, to treat, and hence the study of its nature and treatment has strong claims on your attention.

This man is, as you have seen, about the middle age in point of years, but he is old in constitution. In this country you will find most of the labouring poor exhibiting symptoms of premature old age, the combined result of poverty, intemperance, and hardship. Obligated to work in the open air in bad weather, they get catarrhal affections, which are renewed by repeated exposure, and prolonged for want of proper care. The natural effect of cold frequently renewed and generally neglected is, that a tendency is produced in the bronchial

mucous membrane to become congested and inflamed with facility, until at length the derangement becomes permanent, and the mucous membrane no longer returns to its normal and healthy condition during the intervals.

The secretion of the mucous membrane of the bronchial tubes, in a perfectly healthy person, is almost entirely destitute of matter to be expectorated. In the normal state, the secretion of the bronchial mucous membrane, though continually going on, scarcely ever exists in superfluous quantity, for a certain proportion of it is carried off by exhalation or absorption; *a perfectly healthy person, breathing a pure air, has no expectoration whatsoever.* The moisture secreted by his bronchial mucous membrane contains nothing that the expired air cannot carry away in vapour, without leaving any residuum which gradually accumulating would at length require to be expectorated. In this respect the bronchial mucus in the healthy state differs from the mucus of other membranes of the same class; but disease destroys this beautiful provision, and gives rise to a secretion of morbid mucus which cannot be gotten rid of in the usual way, and which must, therefore, be expectorated. Hence it is, that persons in whom a chronic state of congestion of the bronchial membrane has been generated by repeated colds, have a secretion of superfluous matter always going on, and are constantly expectorating. This may continue for several years without much inconvenience; the principal annoyance the patient suffers is in getting up the phlegm in the morning. At this period there is always an accumulation of fluid in the lungs after the night, during which the cough is less frequent, and expectoration less copious.

Here let me remark that although a person may cough violently during his sleep, he never expectorates. Expectoration is accomplished by the attention being directed to the chest, by an act of volition being put in force, so as to cause a constriction of the bronchial tubes and generate a current of air of sufficient strength to expel the mucus. To effect this, the mere act of coughing is not sufficient, and, consequently, *we do not expectorate during sleep*; for this purpose it is necessary for the patient to be awake.

Frequently recurring catarrhal affections, besides generating a state of chronic derangement of the mucous lining of the lungs, have a necessary tendency to produce other bad effects. Dyspnoea is an ordinary attendant on chronic bronchitis, the vesicular tissue enfeebled by disease loses its natural elasticity, and hence the act of respiration is performed weakly, and with considerable difficulty. In addition to this, the stress thrown on the air-cells and passages gives rise to emphysema and dilatation of the bronchial tubes.

When this man came into the hospital, he was labouring under an exacerbation of his chronic bronchitis from a fresh attack of cold, he also suffered from dyspnoea with a tendency to emphysema, and had been much debilitated by the frequent recurrence of his pulmonary symptoms. I do not intend to make any particular observations here on acute bronchitis supervening on chronic; it is a dangerous disease requiring prompt and careful attention. I merely refer to this case to point out the remedies which were employed and the principles which guided me in their selection.

At the time of our patient's admission, the fever which accompanied the acute attack had subsided. His pulse was tolerably quiet, neither did he present any derangement of the heart's action, and so far had escaped one of the consequences of chronic disease of the lung, namely, dilatation and hypertrophy of the right ventricle. Observe, the most important features in this case, so far as treatment is concerned, were these; there was no general inflammatory condition of the system present, he had neither hot skin, nor quick pulse, his expectoration was copious, the chest sounded well on percussion, and the only stethoscopic phenomena observed were extensive minute and moist bronchial râles. The case then stood thus, extensive bronchial inflammation with copious expectoration, unaccompanied by fever, and occurring in a debilitated constitution. All weakening measures were therefore contra-indicated. It is true that the man had dyspnoea, and complained of tightness across his chest, circumstances which might appear to demand the use of the lancet or leeches; if these means had been employed, he would certainly have experienced some relief; but in the course of a few hours the symptoms of distress would have returned, the weakness superinduced by bleeding would give rise to increased secretion into the bronchial tubes, and the patient would be worse than before. Under these circumstances we refrained from using the lancet or leeches, but, deeming it advisable to get rid of the last traces of inflammatory action, we gave the following mixture:—

R. Misturæ amygdalarum, ℥ij.,

Nitratis potassæ, ʒij.,

Tartar. emetici, gr. j.,

Tinctur. opii camphorat. ʒss.

Ft. mistura pectoralis, sumat cochleare j. amplum omni horâ, vel urgente tusse.

In explaining the rationale of this mixture,

it is hardly necessary for me to state why the almond emulsion was used. In all cough bottles it is of importance that the basis should consist of some mild mucilaginous fluid, and hence we generally employ for this purpose demulcent syrups, emulsions made with olive oil, spermaceti, or almonds, or decoctions of mucilaginous seeds and roots. With the almond emulsion we combined tartar emetic and nitrate of potash, both antiphlogistic remedies, and calculated to act with peculiar effect in relieving congestion of the bronchial mucous membrane. You are aware that nitrate of potash in large doses is a powerful antiphlogistic, and you have seen it prescribed with excellent effects in cases of acute arthritis treated in this hospital. Nitrate of potash, when given to the amount of two or three drachms in the day, combined with two or three grains of tartar emetic, is, next to bleeding, the most efficient means we possess of reducing inflammatory action, and were I to be asked what remedies I should employ in combating inflammation, supposing there were no such things as the lancet, or leeches, or calomel, I should certainly say nitrate of potash and tartar emetic. When given in small doses this combination proves also extremely serviceable in less severe cases, and it was on this account we gave it in the present instance. To this we joined the camphorated tincture of opium, convinced that its stimulant properties could not prove injurious when combined with antiphlogistics, although it would be improper to administer it alone. Experience has taught that when camphorated tincture of opium is given in cases of chronic cough with expectoration, it will (if much inflammatory action be present) check the expectoration and bring on dyspnoea. But when combined with nitrate of potash and tartar emetic, its bad effects are corrected, while its sedative influence remains unimpaired.

In addition to this, I ordered the nitro-muriatic acid liniment to be rubbed over his chest. This liniment we are much in the habit of prescribing where a rubefacient is required. It is made by diligently mixing one drachm of nitro-muriatic acid and one ounce of lard, by means of a wooden or ivory spatula. When this mixture is complete, two drachms of spirits of turpentine are added; these ingredients soon separate from, and mutually react upon, each other, so that the liniment is spoiled; we, therefore, never make it in large quantities. As his bowels were constipated, I gave him a pill composed of three grains of blue pill, quarter of a grain of colchicum, two grains of scammony, and half a grain of capsicum. Colchicum acts on the biliary secretion, particularly when combined with blue pill, and hence promotes the general action of the intestines. With these I combined a little capsicum in consequence of the patient's complaining of being annoyed by constant flatulence. It is a curious fact that every chronic derangement of the bronchial mucous mem-

brane is accompanied by flatulence. Whether this arises from the irritation of the bronchial membrane spreading by continuity of tissue, and rendering the tongue foul, the stomach weak, and the digestive function unnatural, or whether the derangement of the bronchial mucous membrane, and the imperfect performance of the function of respiration, cause the secretion of air from the lungs to be diminished, in consequence of which air is secreted from the intestinal mucous membrane by a vicarious action, I cannot exactly state, but I think the latter hypothesis not very improbable. It is well known that the mucous membrane of the stomach and bowels enjoys the power of secreting and absorbing air; it secretes carbonic acid, nitrogen, and also other gases which seem peculiar to it, such as sulphuretted hydrogen. I am not aware that there is any distinct evidence that the last named gas is ever secreted by the bronchial mucous membrane, but as there are some cases in which the breath is remarkably foetid, I think it remains for future experiments to decide whether it may not be so under certain circumstances. It is, however, by no means improbable, that when an adequate cause produces considerable derangement in the respiratory function, and alters the nature of the ærial secretion from the lung, the mucous lining of the stomach and bowels may take on a vicarious action, and secrete gases analogous to those which in the normal state are secreted by the mucous membrane of the bronchial tubes. I think I have seen some well marked examples of this translation of the function of secreting air from the pulmonary to the intestinal mucous system in cases of spasmodic asthma and hysteria. I have seen patients who, previously to an attack of asthma, had no symptoms of flatulence, and observed that accordingly as the disease proceeded and the derangement of the respiratory function increased, the bowels became distended with air. In hysteria, also, where derangement of the respiratory function is plainly denoted by the heaving of the chest, sighing, and dyspnoea, there is generally enormous and sudden inflation of the belly, loud borbyrygmi are heard, and there is a constant disengagement of air upwards and downwards.

But to return to our patient. After we had removed all traces of active inflammation, and the case had been reduced to one of ordinary chronic bronchitis, we changed his cough mixture for the following:—

R. Misturæ ammoniaci, ℥vj.
 Carbonatis sodæ, ℥ss.
 Tincturæ opii camphorat. ℥ss.
 ——— hyoscyami, ℥j.
 Vini ipecacuanhæ, ℥ij.
 Fiat mistura pectoralis, sumat cochl. j.
 amp. pro dose.

The carbonate of soda was given with the view of removing some acidity of stomach which he complained of; besides, it is a fact that alkalies produce good effects in many

cases of pulmonary irritation, as must have struck you from witnessing the success of the popular remedy for hooping-cough, recommended by Mr. Pearson. You will observe, gentlemen, how very different this cough mixture is from the former, it is much more stimulating, and at the same time more powerfully anodyne, the opium being here less diluted, and being aided by henbane; the addition of ipecacuanha was intended to prevent a too speedy action on the part of the other ingredients in diminishing the expectoration and constipating the bowels.

I wish to call your attention to the plan of treatment, not with reference to this case alone, but with respect to chronic bronchitis in general. We first gave a combination of nitrate of potash and tartar emetic with the view of removing any remaining traces of inflammatory action; we next prescribed the misturæ ammoniaci with camphorated tincture of opium and carbonate of soda, &c., and, finally, when the cough became entirely chronic, we gave the compound iron mixture with tincture of hyoscyamus in draughts, and an electuary consisting of sulphur, cream of tartar, and senna. I need not repeat what you will find in every treatise on materia medica, with respect to the use of the compound iron mixture; it is not to be given until all traces of fever and local inflammation are removed, and never until the secretion from the lungs is copious and expectoration free. In such cases the patient is generally weak, and the inordinate secretion adds to his debility. Here the compound iron mixture proves extremely serviceable, but you should commence its use with caution. Some persons are in the habit of giving it in doses of half an ounce two or three times a day; this I never do; I begin with a drachm twice or three times a day in an ounce of spearmint water, and add from half a drachm to a drachm of tincture of hyoscyamus. The dilution with mint water, and the addition of tincture of hyoscyamus, render it more valuable, by causing it to be more easily borne by the system, and less likely to be rejected by the stomach.

Let me now explain my reasons for ordering the following electuary:—

R. Electuarii sennæ, ℥ijj.
 Pulveris supertart. potassæ ℥j.
 Sulphuris loti, ℥ss.
 Syrupi zingiberis, q. s.
 Ut fiat electuarium, sumat cochleare, j.
 parvum bis vel ter quotidie.

In the first place, when giving any stimulant medicine internally it is essentially necessary to attend to the state of the bowels; in the next place, keeping the bowels freely opened has a very remarkable effect in diminishing inordinate secretion from the bronchial tubes. Where the patient's strength can bear it, I often diminish supersecretion from the lung by strong hydragogue purgatives, as you saw in the case of a patient in the chronic ward,

who had orthopnoea and such an excessive secretion into the bronchial tubes as to threaten suffocation. The patient being a strong man, and having no symptom of intestinal irritation, I prescribed a bolus, composed of a grain of elaterium, two of calomel, ten of jalap, and five of scammony, forming a powerful hydragogue purgative, which produced several copious fluid discharges. The man bore its operation well, and I repeated it in two days with the most decided benefit; indeed he experienced from it more complete relief than he would have done from bleeding, blistering, or any other remedial means. In some cases of bronchitis with excessive secretion you will be able to produce very striking effects by the use of hydragogue purgatives; this, however, will require both judgment and discretion, and it should be borne in mind, that in the majority of cases there are many circumstances which contraindicate their employment.

With respect to the use of sulphur in this case, I was led to prescribe it, in this and many other similar cases, from observing that chronic cough and long continued congestion of the bronchial mucous membrane were more effectually relieved by the use of sulphureous waters, such as the Lucan and Harrowgate Spas, than by any other remedy that could be devised. I may here also observe, that the Lucan waters produce very striking effects in diseases of the skin, and that I have seen intractable cases of psoriasis, which lasted for years, yield to the use of the Lucan waters. It would appear that sulphur when taken into the system, is either eliminated by the kidneys in the form of sulphates, or exhaled from the skin and mucous tissues in the form of sulphuretted hydrogen, and in this way we arrive at some explanation of its action in diseases of the skin and chronic irritation of the bronchial mucous membrane. In fact, paradoxical as it may appear, sulphur, although evidently stimulating, is nevertheless very efficacious in curing many diseases connected with, or depending on, inflammation or congestion. Thus exhibited internally and properly combined, what remedy gives such prompt and certain relief in that painful affection, piles? How rapidly does the specific irritation of the skin, termed scabies, yield to its use? These and similar facts, which might be brought forward in abundance, ought to countenance the use of this medicine in certain chronic inflammatory affections of the bronchial tubes. The celebrated Hoffman was in the habit of adding sulphur to his cough prescriptions in all cases of chronic bronchitis in the aged and debilitated, and I have no doubt that from five to ten grains of sulphur, taken three or four times in the day, is one of the best remedies that can be prescribed in cases of chronic cough, accompanied by constitutional debility and copious secretion into the bronchial tubes. Within the last four years my attention has been particularly directed to the use of sulphur

in this and other affections, and I can state from experience that it is a most valuable remedy. As it has a tendency to produce elevation of the pulse, increased heat of skin, and sweating, it will be necessary to temper its stimulant properties by combining it with cream of tartar, which is a cooling aperient, and has the additional advantages of determining gently to the kidneys*. The addition of the electuary of senna gives additional value to the combination, and quickens its action on the intestines.

Such, gentlemen, are the principles that guided me in prescribing for this man. The long continuance of the complaint, the serious and extensive derangement of the pulmonary mucous membrane, the age, debility, and impoverished circumstances of the patient forbid me to hope for a perfect cure; but he has been much relieved, and the same remedies applied to less desperate cases would have produced very striking effects. Still, if fortune were this moment to prove favourable to the poor fellow, if, when he leaves the hospital, instead of returning to hardship and exposure, he had the means of living in comfort, taking proper care of himself, travelling for health and amusement, and using a course of chalybeate spa waters, I have little doubt that with these aids the reparative powers of nature would succeed in obliterating every trace of pulmonary derangement.

Permit me, gentlemen, to make a few observations here on what is popularly termed, cough. What is cough?—A sudden and violent expulsion of air from the lungs, produced by forcible contraction of the diaphragm, aided by the abdominal and other expiratory muscles. What is the cause of cough?—Pulmonary irritation. What is the nature of this pulmonary irritation?

Here, gentlemen, is a question which every practitioner should put to himself when called on to treat a case of cough, and what affection is there which so frequently demands our assistance and tasks our ingenuity? How abundant, how varied, are the examples of cough we meet with in our daily practice! How obscure do we not find its nature on many occasions, and how difficult and perplexing its treatment! Where the source of irritation is manifest, where the nature of the disease is simple and easily detected, where, after a proper examination, we can point to some part of the respiratory system, and say here is the seat of the disease; in such cases, indeed, our course is sufficiently clear, we may proceed with confidence and practice with success. But how often are we, after weeks and even months of close and painful attention, baffled in our best directed efforts, and forced to admit the humbling conviction that all our remedies are inefficient and useless, and that

* Baglivi has well said, "In morbis pectoris ad vias urinae duceudum est."

our character as well as that of the profession is likely to suffer in public estimation? How often, too, do we discover with surprise, that the cough which we have been treating for weeks as a pure pulmonary affection, depends not on any primary derangement of the respiratory system itself, but upon the irritation of some distant organ, or upon peculiar conditions of the whole economy?

Before I proceed to inquire into the nature of the various sources of pulmonary irritation producing cough, I wish to remark that the exciting cause, or, in other words, that which immediately precedes and seems to give rise to a tendency to cough, is a sensation of tickling in the mucous membrane of the trachea, close to its bifurcation, and opposite the hollow at the fore part of the neck. It is also a curious fact that this sensation of tickling or itching is peculiar to this situation, being never felt in any other part of the pulmonary mucous system. Whether the disease be seated above, as in case of laryngeal affections, or whether it be below, as in case of disease of the lining membrane or parenchyma of the lung, it is here alone that the tickling sensation is felt. Another circumstance equally remarkable and equally difficult of explanation, is the effect of position in cough. Persons labouring under slight bronchitis, or rather slight inflammation of the trachea, who scarcely cough half-a-dozen times during the course of the day, will, the moment they lie down at night, be seized with a violent and harassing cough, which may last for several minutes, and sometimes for hours, with little intermission. We can easily understand why empyema or pneumonia of one side of the chest may produce cough in certain positions and not in others, for here we have an obvious physical cause; the accumulated fluid in the pleural cavity in the one case, and the diseased lung, whose specific gravity has been much increased by solidification, in the other, exercise an inconvenient degree of pressure on the sound lung, and hence give rise to irritation and cough, particularly in those positions which favour the operation of these physical causes of irritation. Here, however, the cause of irritation is very obscure. It may (but this I merely offer as an hypothesis) depend on the fluid secreted by the mucous membrane trickling over that part of the trachea where the tickling sensation is felt, the flow of mucus to this part being favoured by the recumbent position. That it does not depend on any supposed temporary congestion and irritation of the lung, from the impression made on the skin by cold bed-clothes, I am quite convinced, for I have repeatedly observed it in persons warmly dressed, from merely lying down on a sofa close to the fire. You will, therefore, bear in mind, gentlemen, that although usually, when coughing is induced by any sudden change of position, we may infer that it is connected with some

serious lesion of the lungs, or pleura, yet we must not attach too much importance to this symptom in arriving at this conclusion, for cases are occasionally met with, in which mere tracheal, or bronchial, inflammation is attended with the same symptom to a very remarkable degree.

I may observe, *en passant*, that the sensation of tickling, or itching, appears to be almost exclusively confined to the skin. Here it appears to be dependent on slight causes, apparently incapable of producing that modification of nervous sensation, termed pain. In other cases it seems to be connected with the rise and decline of the phenomena which indicate inflammatory action, arising in the first case (where it is generally less observable) from that nervous modification which precedes inflammation, and in the second being connected with some change in the nerves of the part which precedes its return to a healthy condition. It does not appear to affect the mucous tissues, except in a very slight degree, and under peculiar circumstances. It is not observed in the pulmonary mucous tissue, except at that part of the trachea which I have already mentioned, and it does not occur in any part of the intestinal mucous membrane. The only parts connected with the intestinal tube, in which it is felt, are the nose and on the anus, and here it is within the reach of scratching, the ordinary mode of relief. This is a fortunate circumstance, gentlemen, for if any part of your bowels were to itch as your skin sometimes does the annoyance would be quite intolerable. If the presence of lumbrici in the small intestines, instead of producing a troublesome itchiness of the nose, as it often does,—if it produced, I say, a degree of itching equally intense in the mucous membrane of the bowels and stomach, what patient could endure greater torments than a person so afflicted? If ascariides gave rise to as intense a degree of itching within the colon, as they occasion at the verge of the anus, how dreadful would be the suffering thus induced!

Passing over the obvious and well known sources of pulmonary irritation, producing cough, such as bronchitis, pneumonia, &c., the first cause to which I shall direct your attention is one of not unfrequent occurrence, and where a mistake in diagnosis may lead to a practice useless to the patient and discreditable to the practitioner. The best mode of illustrating this is by giving a brief detail of a case which I attended with Dr. Shekleton. A young lady, residing in the neighbourhood of Dorset-street, was attacked with symptoms of violent and alarming bronchitis. The fits of coughing went on for hours with extraordinary intensity; it was dry, extremely loud, hollow, and repeated every five or six seconds, night and day, when she was asleep as well as when she was awake. Its violence was such that it threatened, to use a vulgar but expressive phrase, to tear her chest in pieces, and all her friends wondered how her frame

could withstand so constant and so terrible an agitation, and yet she fell not away proportionally in flesh, had no fever, and her chest exhibited nothing beyond the râles usually attendant on dry bronchitis. She was bled, leeched, blistered, and got the tartar-emetical mixture, but without experiencing the least relief. We next tried antispasmodics, varying and combining them in every way our ingenuity could suggest, still no change. We next had recourse to every species of narcotics, exhibiting in turn the various preparations of conium, hyoscyamus, opium, and prussic acid, but without the slightest benefit. Foiled in all our attempts we gave up the case in despair and discontinued our visits. Meeting Dr. Shekleton some time afterwards I enquired anxiously after our patient, and was surprised to hear that she was quite recovered and in the enjoyment of excellent health. *She had been cured all at once by an old woman.* This veteran practitioner, a servant in the family, suggested the exhibition of a large dose of spiritus of turpentine, with castor oil, for the purpose of relieving a sudden attack of colic, two or three hours afterwards the young lady passed a large mass of tape worm, and from that moment every symptom of pulmonary irritation disappeared.

The next kind of cough, in which the cause of pulmonary irritation is often misunderstood, is that which occurs in hysteric females. This kind of cough is one of the most alarming diseases in appearance you can possibly witness; in some it is loud, ringing, incessant, and so intensely violent, that one wonders how the air-cells, or blood-vessels, escape being ruptured. In others it is quite as incessant, occurring every two or three seconds, night and day, but is not very loud, and, indeed, in some it scarcely amounts to more than a constant teasing hem; in general the pulse is quick, but it is the quick pulse of hysteria, not of inflammation or fever. The patient suffers no aggravation of the cough from inspiring deeply, and her countenance exhibits no proof of malæration of the blood, on the contrary it is blanched and pallid. She complains of variable, or deficient, appetite, headache, cold feet, and irregular or absent catamenia; although the cough continues for weeks, or even months, she does not emaciate like a person in incipient phthisis, although so much disturbed by the cough, and subsisting on so small a quantity of food.

Here the history of the case, a knowledge of the patient's habit, and the use of the stethoscope are of great value. You will find that the patient is subject to hysteria, that she is generally pale and of a nervous habit, that the attack came on suddenly, and was superinduced by mental emotion, or some cause acting on the nervous system, or else arose gradually as one of the sequelæ of catamenial disturbance, that the heat of skin and state of pulse are by no means proportioned to the violence of the symptoms, and the stethoscope will tell you

that the signs of organic derangement of the lung are absent. You will thus be enabled to arrive at an accurate notion of the nature of the disease, and you will save the patient from the useless and often dangerous employment of antiphlogistic means. Bleeding and leeching are, generally speaking, injurious; such cases are best treated by stimulants, antispasmodics, and stimulant purgatives, together with change of air, travelling, and the use of chalybeate spa waters.

The third species of obscure cough, to which I shall direct your attention, is one of deep importance for many reasons. It is that species of cough which depends upon pulmonary irritation connected with a venereal taint in the system. That syphilis may attack the pulmonary as well as the cutaneous, osseous, mucous, and other tissues, is not a discovery of modern times; it is a form of the disease long known, and you will find it mentioned by many of the older writers. Since syphilis has been classed by Willan and others among diseases of the skin, this notion seems to have been either abandoned or forgotten, but, as it strikes me, with very little justice. I entertain a firm conviction, that syphilis may affect the pulmonary as well as it does the cutaneous, or mucous, or osseous tissues, and that a patient, labouring under a venereal taint, may have irritation from this cause set up in the lung as well as in any of those organs in which it is usually manifested. The first person who mentioned this circumstance to me was the late Mr. Hewson, and since that time I have had repeated opportunities of confirming the truth of his opinion. Richter, Alibert, and Paget have well observed, that Willan and Bateman's classification of diseases of the skin is liable to the paramount objection, that it has no reference to the constitutional origin of cutaneous affections. I have the very same fault to find with modern treatises on diseases of the lungs. Pathologists have indeed inquired most accurately into the numerous morbid changes to which the pulmonary tissue is subject, but they have omitted a no less important part of their task, which is to investigate the states of constitution which originated these changes. The agency, indeed, of scrofula has been inquired into with care, but how little attention has been paid to rheumatism, gout, syphilis, and scurvy, the fruitful sources of numerous diseases of the chest.

By far the most interesting point, connected with this affection, is its diagnosis; on this every thing depends. The great importance attached to the diagnosis arises from the circumstance of this disease presenting symptoms analogous to, and consequently being frequently confounded with, phthisis. A patient comes to consult you for cough; you find him pale, emaciated, and feeble; he sleeps badly, and is feverish at night, and has a tendency to sweat. Here there may be a double source of error. If the disease be mistaken for tubercle, and mercury not given, bad consequences will

result; on the other hand, if tubercles be present, the effect of administering mercury will be to precipitate the disease to a fatal issue.

What is the nature of this disease, and how are you to recognise it? Mainly, I answer, by the history of the disease. If the patient's sufferings have commenced at the period of time, after primary sores on the genitals, when secondary symptoms usually make their appearance; if some of his complaints are clearly traceable to this source; if, along with debility, night-sweats, emaciation, nervous irritability, and broken rest at night, we find cough; and if this group of symptoms have associated themselves with others, evidently syphilitic, such as periostitis, sore throat, and eruption on the skin, then we may, with confidence, refer all to the same origin, and may look upon the patient as labouring under a syphilitic cachexy, affecting the lungs as well as other parts. In forming this diagnosis much caution and care are necessary, and we must not draw our conclusion until we have repeatedly examined the chest by means of auscultation and percussion; if these fail to detect any tangible signs of tubercles, we may then proceed to act upon our decision with greater confidence, and may advise a sufficient but cautious use of mercury. Under such circumstances it is most pleasing to observe the speedy improvement in the patient's looks and symptoms; the fever, night-sweats, and watchfulness diminish, he begins to get flesh and strength, and, with the symptoms of lues, the cough and pectoral affection disappear. I am not prepared to say which of the pulmonary tissues is most usually attacked by the venereal poison, but I believe that it chiefly tends to the bronchial mucous membrane, although, like other animal poisons, *e.g.*, those of measles and scarlatina, it may also occasionally produce pneumonia.

The fourth species of obscure pulmonary irritation, producing cough, is that which is connected with a gouty diathesis. Gout may attack almost every tissue in the body. We may have it in the joints, as you are all well aware of, we may have it in the muscles and muscular aponeuroses, forming what has been termed the rheumatic gout; it occurs frequently in the fibrous tissues, and I have several times observed it in the cellular substance of various parts of the body, forming either diffuse œdema or tumours, which are exceedingly tender to the touch, and which are removed by treatment calculated to relieve the constitutional affection. It may attack the heart, giving rise to true pericarditis, or else to a functional disease with palpitations, a sensation of fluttering and sinking about that organ, and very remarkable intermission of the pulse; or it may affect the stomach, occasioning dangerous spasm, or various dyspeptic symptoms; or it may seize on the intestines, producing irritation, colic, and gouty diarrhoea. I remember a patient, of a confirmed

gouty habit, expressing a great deal of surprise at getting an attack of gout in the testicle, for he could not conceive how a disease, which generally affects the joints, could occur in an organ so different in its nature. I replied that the matter could easily be explained; because fibrous tissue, which gout most frequently attacks, enters into the composition of the testicle as well as that of the joints. Indeed the testicle, with reference to the texture of its envelopes and the extent of motion it enjoys, may be said to be provided with a sac-like joint. In like manner, gout very frequently attacks the mucous membrane of the trachea, or bronchial tubes, causing a dry, annoying, and often a very obstinate cough. Where this cough comes on along with the fit of inflammation of the joints, it is true nature is frequently overlooked, and it is believed to have originated in cold, and to be mere common bronchitis. No matter, gentlemen, what be the cause of inflammation in a gouty habit, no matter what the organ attacked by the inflammation be, it almost invariably assumes the character of true gouty inflammation. If a gouty person sprains a toe, or an ankle, matters, after progressing for a time in the ordinary way, are sure in the end to exhibit a change of character, and the inflamed parts are observed either to grow unexpectedly worse, or to become stationary, at a time when a speedy termination of the local affection seemed approaching. This is owing to its being now modified by the constitutional tendency to gout, which localises itself in the affected part. Precisely the same relations may be often observed between common bronchitis, produced by cold in a gouty habit, and the gouty bronchitis it indirectly produces. Gouty bronchitis often becomes chronic, continuing until it is relieved by a regular fit of the gout in the extremities.

The fifth species of pulmonary irritation, in which the source of the disease is more or less obscure, is that which is connected with the scorbutic diathesis. It is important to be aware of this, particularly for those who have charge of the health of the poorer classes, which is almost of more value than that of the rich, for on it their labour and their means of support depend. Among the poor, particularly in cities where the majority live on salt provisions, the scorbutic diathesis is very prevalent. It manifests itself either in the form of purpura, or in tendencies to hæmorrhage from the nose, stomach, bowels, and bladder. It sometimes attacks the lungs, producing irritation of the bronchial mucous membrane, with cough, and spitting of blood, and occasionally gives rise to pulmonary apoplexy. It is evident that pulmonic cases of this nature, originating in a scorbutic diathesis, produced by confined air, damp lodging, and a salt diet, will require a treatment peculiar to themselves, both during the attack and during convalescence.

The last source of pulmonary irritation, to

which I shall direct your attention, is that which proceeds from scrofula. You all know that scrofula has a tendency to attack every tissue in the body, but you may not perhaps be aware, that it may affect those tissues in very different ways, and that scrofulous irritation may manifest itself in various forms, from the most trifling and transitory to the most extensive and permanent. I recollect a case I attended with Dr. Jacob, in which this fact struck me very forcibly. A fine boy of high complexion, precocious intellect, and other marks of the scrofulous diathesis, got an attack of scrofulous ophthalmia of an intense character, and it required all the skill and ingenuity of Dr. Jacob to save him from blindness. During the period of our attendance, his brother (who was also of a strumous habit) began to complain of parts of his arm being sometimes a little sore. This circumstance attracted my attention, and on examination I found that several circular diffused swellings, of various sizes, often equalling half a crown in diameter, had successively appeared on different parts of his extremities and body. They evidently depended on inflammation of the sub-cutaneous cellular tissue, and exhibited a remarkable example of a most transitory local affection, produced by a constitutional cause, for these swellings arose, arrived at their acmé, and subsided in the space of ten or twelve hours; they constituted, in truth, the first efforts of the scrofulous diathesis, to localise itself, and, after a few weeks' continuance, they were replaced by distinct and fixed scrofulous inflammation of the metatarsal bones.

Here was a very curious and instructive fact. A boy, evidently of a scrofulous diathesis, has circumscribed tumours, which arise, come to maturity of irritation, and subside in the course of a few hours. In some weeks afterwards, scrofulous irritation, in a decided and permanent form, fixes itself in the foot, producing inflammation and ulceration. From this it may be inferred, that scrofula (for in this case I am firmly convinced these tumours were connected with strumous diathesis) may attack parts not only in its more permanent and destructive forms, but also in a manner so trifling and so transitory, as to subside in a few hours and leave no trace of its existence. The inferences deducible from this fact are numerous and important, for if scrofula may thus produce an acute and transitory inflammation of the subcutaneous cellular tissue, surely it may occasionally give rise to somewhat similar affections of internal organs, as the bowels, the lungs, &c., and thus may occasion an acute bronchitis, a pneumonia, or an inflammation of the mucous membrane of the intestines, totally independent of the operation of cold, or the usual causes of such affections. It has been too much the custom to refer merely chronic and fixed local inflammations to the agency of constitutional causes. The example before us proves that even the most transitory may have this origin.

Scrofulous irritation may affect either the lining membrane or the parenchyma of the lung, giving rise in the one case to scrofulous bronchitis, in the other to scrofulous pneumonia, two affections which may exist separately or combined, and either of which may prove fatal, with or without the development of tubercles in the lungs. Tubercles have, as I have elsewhere proved, too exclusively engrossed the attention of those who have investigated the pathology of phthisis; they are a very frequent product of the scrofulous diathesis, but the scrofulous bronchitis and scrofulous pneumonia are still more frequent and more important, and do not, as is falsely supposed, depend upon the presence of tubercles in the lungs. The pneumonia, the bronchitis, and the tubercles, where they occur together, are all produced by one common cause,—scrofula. Of this more hereafter.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXII.

*Prognosis and Treatment during and after
Labour.*

GENTLEMEN,—Having described to you the various species of eutocia, I now proceed to the prognosis and treatment, both during and after labour. “The more active and free from pain the patient is in her loins and feet, and the less she suffers from fulness and pain in the head, &c., at the commencement of labour, the better and easier will it be *.” To insure this favourable state of the system, it will be necessary that the bowels should be kept moderately open by castor oil, and if there be the slightest reason to suspect that the bowels are at all loaded at the beginning of labour, an injection will be requisite; by emptying the rectum the head experiences less difficulty in passing through the cavity of the pelvis, the uterus is excited to stronger pains, and the labour is thereby rendered cleanly, which otherwise would be so disgusting to the patient, as well as the accoucheur, because the sphincter ani being deprived of all power from the great degree of distension, which the parts are made to undergo, any fecal matter, which may happen to be in the rectum, is involuntarily expelled when the head comes on the perinæum. “At the beginning of labour the abdomen (in a front view) has by no means a globular but rather an elliptical oval figure.

* Wigand Geburt des Menschen, vol. ii.

* * * * About the middle of labour it becomes somewhat smaller, lower, and more oval; towards the end of labour, when the uterus, from the advance of the child and escape of the liquor amnii, becomes diminished in size, the inferior half alone appears much distended, while the superior part, or fundus, is flatter. * * * The more the figure of the abdomen, at the beginning of labour, approaches to the state in which it is at the third or fourth stage, the quicker the labour will be, * * * for in this case the uterus assumes a pyriform figure, and the more it does this the more powerfully it acts, and the progress of the labour will be proportionally more rapid.*' The smaller the uterus is at the beginning of labour the easier will be its course, a large uterus shows distension, with lymph, blood, liquor amnii, twins, or a very large child, and therefore generally indicates a slow labour.

The *position*, in which the patient should remain during labour, and in which it is most favourable for her to be delivered, has been a subject of considerable discussion, more especially upon the Continent during the last century, where much has been written about it. In former times it was the custom for the husband to take her upon his knees, and for her to be delivered in this posture. H. Van Deventer first brought the labour chair into general use in Holland and the Low Countries, but he must not be considered as the inventor of it, because the celebrated surgeon, Ambrose Paré, so early as 1573, speaks of a labour chair with an inclined back, which he prefers to the common bed. Deventer's chair was in such request throughout Holland, that it was the common present to a young woman on her marriage day: almost every professor invented a new chair, which went by his name, much in the same way as they do now with the forceps. The principle of these labour chairs is the same throughout, all of them are more or less furnished with straps, cushions, &c., by which the patient can fix her extremities, and thus allow the abdominal muscles to act with the greatest power, and certainly, if our object be only to accelerate labour, they are very good, but our object is not that the child should be born as quickly, but as safely, as possible; a rapid labour is never desirable, either for the mother or the child; from being able to assist her pains so powerfully, the head passes through the external passages before they have had time to dilate sufficiently; hence, as Tolver remarked in 1770, "at Brussels, where Deventer's chair is indiscriminately used, lacerations of the fourchette and perinæum are very frequent." In France these chairs have ceased to be used for the last eighty or ninety years, and the women are delivered lying on their back. In England, as far as I know, they have never been used, and the women, for the last century at least, have

been delivered on a common bed, on their left side. This was at one time called the Burton position, from Dr. John Burton, of York, who published a work on midwifery in 1751, but the advantages of lying upon the left side were known long before Burton's time, for Fielding Ould, whose work appeared in 1742, says the side is certainly the most advantageous posture for natural labour. In Germany the practice varies at the different schools of midwifery; in some the patients are delivered on their backs as in France, in others upon their left side as in this country, while at Berlin and Dresden a peculiar cushion for the purpose has been used by the late Professor Von Siebold and Professor Carus.

As soon as the os uteri begins to dilate we should endeavour to ascertain the position of the child; instead of *taking a pain*, as it is called, or, in other words, making the examination during the pains, as is commonly directed, examine during the intervals, otherwise the membranes may be prematurely ruptured, the liquor amnii will escape, and thus the labour be considerably retarded. You cannot be too cautious in this respect, especially in primiparæ, where the membranes are so liable to give way at an early stage; besides, during a pain the membranes become so tense, that it is impossible to ascertain the position of the child. The patient may take whatever posture she likes, until the os uteri is fully dilated, and the membranes ready to burst; it is now the proper time to put her upon her left side, because in many cases, especially in those who have already had children, the child is apt to follow the rupture of the membranes very quickly; all the preparations for assisting the patient's exertions, as towels to hold by, or cushions and pillows to pull or push against, are in my opinion not desirable. I am no friend, gentlemen, to rapid labours, for those which are slow and gradual are, properly speaking, the only healthy ones.

If the accoucheur has not been certain of the nature of the presentation before the rupture of the membranes, he should examine immediately upon its taking place; even if he does know how the child presents, he should examine at this moment, to ascertain what progress it has made, and whether, also, the umbilical cord be not prolapsed. All violent straining, all attempts to dilate the os uteri artificially, as by rubbing in fat, butter, &c., are highly injurious, nor do they ever attain their object, for, by irritating and inflaming the os uteri, they only serve to prolong the labour. Much has been written on the means of hastening labour; thus Stein wrote a treatise entitled, "*De Novâ Enchyrafi ad Partum accelerandum.*" In primiparæ, where the patient is young, robust, and plethoric, where the pains are irregular and inefficient, where there is any disposition to pain of head, or where the abdomen is unusually painful, both during, and between the pains, venesection

* Wigand Geburt des Menschen, vol. ii.

will be of the greatest benefit; the pains become regular, and act more powerfully and efficaciously upon the os uteri, which becomes also more dilatable. In labour not greatly protracted, as says Mr. Burns, it is better to trust to clysters, to gentle motion, and change of posture, or to sleep, if it offer naturally, and the patient be recruited by it; if, however, she be fatigued and debilitated, the pulse weak, &c., a smart clyster, followed by thirty drops of laudanum, does not suspend the pains, but rather excites them; but in tedious labours, where there is heat of skin, full pulse, thirst, and restlessness, where the passages are hot, dry, rigid, and tender, the pains severe, but inefficient and irregular, venesection will be very beneficial.

The pains do not compel the patient involuntarily to strain and bear down, until the head has passed the os uteri and entered the vagina, and the accoucheur can frequently tell, the moment he enters the room, how far the labour is advanced, by the tone in which the patient expresses her sufferings. The abdominal muscles are not called into action by the pressure of the head upon the rectum producing a vehement call to evacuate the bowels, but from that peculiar sympathy which exists between the os uteri, vagina, and abdominal muscles, for in cases where the os uteri is pushed down very low in the pelvis, and is but little dilated, there is no incitement to strain. You are aware that in primiparæ the head is felt very low in the pelvis for some days before labour, and yet, with all this, we find that no involuntary efforts to bear down are produced, although, from its position in the pelvic cavity, the head must have exerted considerable pressure upon the rectum. As I before told you, gentlemen, when speaking of labour, the violent straining pains which come on towards the latter part of labour, arise from the immense distension which the vagina suffers at this moment; it seems to have the same sympathetic connexion with the abdominal muscles, as the sphincter ani and rectum have. Thus, at the moment when a large mass of fecal matter is passing through the rectum, the abdominal muscles are involuntarily excited to bear down. The tenesmus of dysentery is merely a modification of the same; the rectum is highly irritated, and the abdominal muscles instantly sympathise.

Upon no subject is the accoucheur so liable to be importuned, than as regards the probable duration of the labour, and upon no subject is it more difficult to form an opinion upon any grounds of certainty. Wigand, who paid minute attention to the whole process of labour, and every thing connected with it, asserts that he could generally form a pretty accurate prognosis as to the duration of labour, by ascertaining the configuration and state of the vagina. For instance, if he found it to be narrow throughout, to be cool, dry, rather rough than smooth, and unyielding, it was a sign that the course of labour, both at its com-

mencement and termination, would be slow and difficult. If, however, the entrance of the vagina be small and but little developed, but its cavity sufficiently roomy, soft, warm, moist, &c., we may expect the labour to proceed with tolerable briskness at the commencement, but towards its close to become slow and lingering. If, on the other hand, an opposite configuration be present, where the entrance of the vagina is well developed, but the upper half contracted, the labour, although lingering at its commencement, will become rapid during the latter part. Lastly, where the vagina, throughout its whole extent, is equally spacious, warm, moist, &c., &c., we have every reason to anticipate a speedy and easy labour. He assures us that, by attention to these points, he has frequently been enabled to form a very certain prognosis as to the duration of labour, and, in some few cases, where the form of the vagina has been well marked, I have found his observations borne out by experience.

Very tedious or very rapid labours seem to be almost hereditary in some families, and we not unfrequently find where two or three sisters have had unusually slow and lingering labours, that their mother was remarkable for the severity of her labours also. It has been also observed, in cases where the patient has borne all her children several weeks before the time, that this disposition to premature labour has been also remarked in other members of her family. La Motte gives two or three instances where the pregnancy terminated seven months after marriage, and where the patient had thereby excited the suspicions of her husband, every succeeding labour came on at the same time, and, in one case, the daughter of the lady showed a similar disposition to early labour.

The management of the perinæum during labour is a subject of considerable importance, the more so because it is one to which your attention will be more or less required in every labour. Towards the end of labour the perinæum becomes excessively distended by the pressure of the head against it, so much so, that a person who had only seen it in its natural state would scarcely believe it were capable of undergoing such immense distension, but that it must be inevitably ruptured before the head could pass. Its astonishing powers of dilatation can scarcely be ascribed to mere elasticity; might not we rather presume that some change in its structure, similar to that in the vagina, had taken place during pregnancy?

There are two moments at which laceration of the perinæum is peculiarly liable to take place, viz.—when the head and when the shoulders are passing through the os externum. Of the two, I consider the latter by far the most dangerous, for we frequently find, where a very trifling laceration has been produced during the passage of the head, that this has been converted into a wide rent when the shoulders have passed. To prevent laceration,

we must retard the progress of the head through the external parts as much as possible, for the longer the perinæum has time to dilate, the liability to rupture will be proportionately diminished; for the same reason, also, we must desire the patient not to strain. In order to insure this more effectually, we must put her into a posture in which she cannot exert her strength with full effect; thus, for instance, upon the back or side, where the loins are not fixed. The best position is upon the left side, for the pains are more tolerable in this than in any other. Instead of separating the knees with cushions, as is usually done, it is better to put them close together, for this contributes still more to save the perinæum.

Supporting the perinæum has been recommended so long ago as by Puzos and La Motte: it consists in applying the palm of the hand firmly against the perinæum, when this is distended into a round tumour by each pain, with a soft napkin interposed to prevent the hand from slipping, and also for the sake of cleanliness, and this should be changed as often as it becomes wet. The object in supporting the perinæum is to make the hand act instead of it, that is, to make the hand sustain the pressure of the head, until the perinæum has had time to dilate sufficiently. The best mode of supporting the perinæum is with the left hand, because then the right is at liberty to execute any manipulations which may be required. The examining finger of the right hand is also of great service in determining the exact direction which the left should take, and gives instant warning when its support is really necessary.

The late Dr. Hamilton, of Edinburgh, considered it as unnecessary, and this opinion has been lately supported by Professor Mende, of Göttingen, and certainly there are cases where supporting the perinæum is not necessary, but, on the other hand, there are cases where, do what you will, you cannot prevent a laceration. I remember a case where, from the smallness of the os externum, a laceration was deemed inevitable; the gentleman in charge of the patient determined that this should not take place; upon the birth of the child no rupture of the perinæum was observed, *but the left labium was torn across*. The *frænum perinæi* is always torn in first cases, but a considerable laceration into the substance of the perinæum does not occur frequently: when, however, it does happen, little more than mere attention to cleanliness is required, for the parts contract so astonishingly after labour, that what was a wide rent of an inch and half long, in a couple of days will be scarcely more than two or three lines in length; hence, generally speaking, rupture of the perinæum heals very rapidly. The absurdity of the old plan of inducing constipation for a few days cannot be sufficiently exposed, for, when the indurated *fecæes* do pass, they tear open the wound again; rest, great cleanliness, and gently relaxed bowels constitute

the chief treatment. For further information, however, upon this subject, I cannot do better than refer you to Dr. Denman's Essay on Natural Labours, where he speaks about the management of the perinæum.

When the laceration extends into the rectum, the case becomes excessively troublesome and difficult to cure, and *unless* we effect a cure the unfortunate patient is rendered miserable for life. In these cases, the slightest movement of the thighs alters the position of the lips of the wound, and thus tears it open afresh; nor can this be entirely prevented, even by the aid of adhesive plasters or sutures; the edges gradually become callous, and a gaping cleft is the result. Another practitioner now, perhaps, takes charge of the patient, the edges of the laceration are pared afresh, fresh sutures and adhesive straps are applied—but in vain. In obstinate cases of this sort, which had been deemed incurable, my friend, Dr. Dieffenbach, of Berlin, has succeeded in producing complete reunion by the following operation:—having pared away the callous edges of the wound, he brings them together in close apposition by means of the fine lace pins, which he uses in the hare-lip operation and other incised wounds of the face, and, to prevent any movement of the thighs from acting upon the wound, he makes an incision into the cellular tissue on side of it, running parallel with and at a little distance from it; by this means the wound is, as it were, insulated from the neighbouring parts, and the process of cicatrisation proceeds without interruption; the others, being fresh incised wounds, readily granulate from the bottom, and, by the time they are healed, the original laceration is completely united. Dr. Dieffenbach assured me that he found this method succeed perfectly in several cases which had been pronounced to be incurable.

As soon as the head is born, we must examine whether the cord be twisted round the child's neck or not; we should at the same time support the shoulders, because, as I before stated, if but a very small laceration in the perinæum has taken place, it will be sure to be increased. In this position the face swells, but still we must not apply any extractive force to the head in order to hasten the delivery of the shoulders, as the uterus does not always contract immediately after a sudden evacuation of the contents, and may therefore give rise to hæmorrhage.

Supposing the cord be round the child's neck, what are we to do, gentlemen? It is twisted either tightly or loosely; if loosely, you well know it by the face not becoming dark or much swelled,—leave it to nature. The works on midwifery direct that it should be pushed over the head. Oh, yes; they can do it easily enough when it is loose, and then it is scarcely necessary, for we can push it over the shoulders, and that is a much shorter plan; but if the cord be tightly twisted round the neck, the face swelled and black, it is im-

possible to turn it over the head. It very rarely happens that we cannot pass it first over one and then the other shoulder, but when we cannot, it has been recommended to make two ligatures, divide the cord between them, and then extract the child. Now by the time we have done all this, the child runs a pretty good chance of dying from strangulation, or from pressure upon the cerebral vessels; in these cases it is best merely to cut the cord with a blunt rough edged pair of scissors, and, where it is possible, to catch hold of the bleeding extremities of the cord, and hold them between the finger and thumb until the rest of the child be born, and if the child does lose a spoonful or two of blood it is not of great importance. As long as the cord continues to pulsate we should not be in a hurry to tie it and separate the child from the mother. What need is there to hurry?—place the child close by its mother, so as to keep it warm, and wait patiently until the cord has ceased to beat. I have known cases where the cord has been tied prematurely, that the child has given two or three convulsive struggles and ceased to breathe, although it had cried but a moment before. When the cord ceases to beat it should be tied with a narrow piece of tape about two inches from the abdomen of the child; this should be done firmly, and with your hands resting against each other. I never put but one ligature upon the cord, for it is much better to allow the placental extremity to bleed, as we thus drain the placenta of ʒij . to ʒijj . of blood, which facilitates its expulsion and favours the contraction of the uterus; where there are twins, it may be as well, for appearance sake, to place a second ligature upon the cord, but there is no real use in it, for I know of no twin case where the foetal circulations of the placenta have been connected with each other. It has been a question whether it was really necessary to tie the cord at all. When the breathing has been perfectly established, and the pulsation of the cord entirely ceased, we may cut it with a pair of blunt rough edged scissors, and no blood will follow; I say *blunt*, because we thus produce a degree of laceration and contusion in the coats of the umbilical arteries, which cause a greater degree of contraction; thus we see in a state of nature that animals instinctively bite and pull at the cord until it is so lacerated that it separates, and yet no bleeding follows. I have known cases where, from a sudden accession of violent pain, the child was born before the mother has been able to reach her bed; it has been thrown upon the floor with considerable force, and the cord ruptured, but no hæmorrhage from the cord has followed. Nevertheless in civilised life it is by no means safe to leave the cord without a ligature; circumstances will sometimes occur, where, from improper swaddling or other causes, an impediment to the respiration has been produced, and the former circulation has to a degree

returned, and thus the child has bled to death; in ninety-nine cases out of a hundred it might possibly succeed, but it is not safe, and we are only running an improper risk.

As soon as the child is separated and taken away, we must lay our hand upon the abdomen, firstly, to ascertain if the uterus be hard and contracted, and secondly, whether it remains so. This, gentlemen, is of the greatest importance, for I can assure you that more women die from hæmorrhage after labour and from its effects, than from all the difficult labours: this was long ago noticed by that accurate observer, La Motte, who says, "it is certain that more women perish after natural deliveries by some error or other, than after the most painful and laborious ones." Recollect that in no case are we secure against hæmorrhage; the blood may be prevented escaping by coagula stopping up the os uteri and vulva, or from the placenta lying over the os uteri, or in the vagina. This species of clandestine hæmorrhage, viz. where the blood collects in the cavity of the uterus, is particularly to be dreaded; this is what is called *internal uterine hæmorrhage*. Our first act then must be to place the hand upon the abdomen; if it feel hard, and about the size of a child's head, there is no cause of apprehension. Even when the uterus has contracted sufficiently and expelled the placenta, still your patient is not free from danger; the uterus may again relax, become soft, and swell, and hæmorrhage come on; for this reason the accoucheur should, if possible, remain within call for the first few hours, in order that he may be with her at the shortest notice; it is here where the value of a sensible judicious nurse is seen.

According to the usual course of things, the pains, which had ceased upon the birth of the child, return in eight or ten minutes, a small quantity of blood generally makes its appearance, which shows that the placenta is becoming detached, and if, on passing your finger along the cord, you feel the placenta in the os uteri, you may be tolerably certain that it is now entirely separated from the uterus; if, however, it be not within reach of the finger, we may conclude that it is still wholly or partially adherent.

If the placenta be still adhering, we are recommended to apply gentle friction to the abdomen with our hand, in order to excite the uterus to contract; but Professor Naegele rather deprecates this plan, as tending to induce irregular contractions in the lower part of the uterus. I cannot say that I have seen this result. What I have found answer the purpose best, of this sort, is gently joggling the uterus in different directions; the repetition of these little succussions generally produces contraction. If, however, the uterus becomes soft, and the patient complains of sickness, faintness, darkness before the eyes, tinnitus aurium, &c., there is reason to fear that internal hæmorrhage is going on; here a little cold water sprinkled in the face, and a small quan-

tity given to drink, or a cold wet cloth applied to the external parts of generation, or upon the abdomen if necessary, will seldom fail to produce a sufficiently powerful contraction of the uterus. Hence, as I before said, gentlemen, our first act, after separating the child, should be, to ascertain if the uterus be contracted; our second, to ascertain whether it remain so.

Many years ago, a most unfortunate case occurred to the celebrated Boer of Vienna, from not having sufficiently attended to whether the uterus remained contracted. He had just returned from a journey made at the expense of the Austrian Government, during the reign of the late Emperor Joseph II., during which he had visited England and France, and had particularly attended the Schools of Midwifery in London under Dr. Denman and Dr. Osborn. On his return to Vienna in 1789, he was made Accoucheur, and, what we should call here, Serjeant-Surgeon to the Imperial Family, besides being appointed Professor of Midwifery, and Chief Physician to the celebrated Lying-in-Hospital of Vienna. In the following year he was appointed to attend the Crown Princess Elizabeth, first wife of the late Emperor of Austria, in her first confinement. She had a long and tedious labour of two days and nights, during all which time, as long as he was in her presence, the etiquette of the Imperial Court required that he should remain standing. You may, therefore, easily imagine how excessively fatigued he must have been. Boer, nevertheless, from his anxiety to prevent even the risk of anything untoward occurring after labour, declared his intention of watching at the bedside of the Princess all night. This she strongly resisted, perceiving that he was quite exhausted with fatigue, and after some entreaty he yielded to her request, and retired into the next room to take some rest. He did not, however, comply, until two of her ladies of honour had promised to watch by her all night, and to call him the instant anything should happen. They agreed to take it by turns; one watched while the other slept, and the princess soon fell into a sound sleep. The lady who watched was pleased to find her mistress enjoying so refreshing a sleep after her long protracted sufferings; she was pale it is true, but how could that be otherwise after what she had undergone? The perspiration stood upon her face and forehead, which the Countess wiped off as gently as possible so as not to disturb her. The Princess breathed hard, and began to snore slightly, but that only told her attendant that she slept. This snoring, however, became less and less natural, until it rather resembled rattling in the throat. The princess was deadly pale, and in a moment after, to the horror of her unsuspecting attendant, became evidently convulsed. A scream from the terrified lady instantly brought Boer into the room, but it was too late, for in a few minutes after the Princess

expired. The bed under the clothes was found deluged with blood; she had died from hæmorrhage. Either from the warmth of the bed, or some other cause, the uterus had ceased to contract, and had become soft, the pressure from the orifices of the uterine vessels had been removed, and they had continued to pour forth their contents until she had flooded to death. This unfortunate event embittered Boer's whole life; it was one of the first cases which he had attended since his return to Vienna; and from the high favour in which he stood with the Emperor, and from the high appointments which he had received from him, there was no want of envious and malicious tongues to invent abominable falsehoods against him. Boer has retired into the country near Vienna, and has never recovered from the shock.

It is an old saying in Germany, that a primipara should not be allowed to sleep for the first twelve hours after her labour. This must not be taken in the literal sense of the word, but rather be applied to her nurse, who should examine the bed, &c., every now and then, to be sure that no hæmorrhage is going on. It is impossible to say when all chance of flooding is gone by. I have seen a case of severe flooding ten or twelve hours after labour; and Professor Naegele informed me of a case where a young lady of rank flooded to death twenty-four hours after delivery. Baudelocque says "I have seen this accident not appear till the eighth day after delivery, and in another case not till the thirteenth. The uterus was soft to the touch, its neck was flaccid, and the hand might easily have been introduced."

Reviews.

Outlines of Comparative Anatomy. By ROBERT E. GRANT, M.D., F.R.S. Ed., &c., &c. *Part I. containing Osteology, Ligaments and Muscles, illustrated with Sixty-five Wood-cuts.* Pp. 144. Baillière. 1835.

HUMAN anatomy teaches the organisation of man, comparative anatomy that of every animal beneath him. In the dawn of medical science, when human dissections were prohibited by the public, and denounced by the priests as impious and offensive to heaven, the votaries of science were, therefore, compelled to resort to the inferior animals for the exploration of living mechanism. It was from these that Galen described his anatomical characters, but when the human body became the subject of dissection, after priestcraft had lowered its head, it was found that between the mechanism of man and brutes, although there was a great and striking analogy, yet there were characteristic indications of their dissimilitude. It would be almost useless, and, moreover, would be foreign to the object of the present review, to tell of the martyrdoms to anatomical science,

how Vesalius, the daring refuter of error, the chief promoter of anatomical research, was vilified as a madman, how he pilgrimaged to Jerusalem, to avert the dreadful inquisition, for opening the body of a nobleman in whom the heart was found still to pulsate. In those days, little was known respecting the structure of the human frame, less was known of the functions of its different parts, and pathology and morbid anatomy slept silent in their tombs.

But during the latter part of the last half century, when almost all Europe was involved in the calamity of war, the torch of philosophy and science seemed as if it had been lighted at the sun for exploring the caves of the earth. Unprecedented was the advance of philosophy; the geologist pierced into the deep recesses of the earth, the chemist discovered the nature of its materials, and the physiologist, by wisely directed inquiries, and by patient observations and elaborate investigations, spread a wide landscape of beautiful phenomena.

John Hunter arose, a bright luminary in the scientific world, who, by a combination of all those qualities which can aggrandise the name of a man and transmit it to posterity, achieved more for the exaltation of medical science than, perhaps, any who preceded him. And there appeared at the same epoch a yet more brilliant luminary in the constellation of physiology—we mean the immortal Bichat. We have, heretofore, paid a small tribute to his memory, it shall not be resumed. Departed greatness shall not be insulted by a repetition of eulogies.

Still human physiology was imperfect; numerous links in the being were in obscurity, or, if perceived, not comprehended. Something more was required. It was necessary to unravel the mechanism of all the living kingdoms of nature, from the algæ which flourish in the depths of the ocean, the sedum which grows on our walls, up to man, vain glorious, yet the perfection of Nature's workmanship. The physiology of plants was studied; their growth, mode of reproduction, habits, and characteristics, were gradually and successively unfolded, and classified into orders. The animal kingdom was resolved into its orders, genera, and species. Linnæus was the creator of the scientific classification of each of those kingdoms; but the improvements in comparative anatomy which have taken place since the very short period of this author's career, is immense, nay, astonishing; it has assumed a new aspect; what was before confused, a wilderness, a chaotic mass, is now all smooth, orderly, and regular, through the united and gigantic exertions of Mickel, Cuvier, Carus, Blumenbach, St. Hilaire, Cruveilhier, Blainville, with a host of others, and "last though not least," *the author of the present work*. Dr. Grant was, we believe, the first in this country who attempted a complete and entire course of comparative anatomy, and with what success he has accomplished his task, the present work affords ample testimony.

We hear it asked almost daily, what is the utility of comparative anatomy?—of what service will it be to me in the practice of my profession? It is said, we think of Kepler, that when once interrogated on the advantages which geometry would afford man, he replied, "to show him that he is a fool." Comparative anatomy shows to the man who knows but human anatomy, that he knows little, if anything, of his subject. That it is by investigating the mechanism of the lower animals we have become acquainted with the same structures in man, requires no ghost from the grave to tell us; the modern writings furnish a sufficient commentary.

But to the work before us. The author commences it with "General Observations on the Osseous System of Animals," and he remarks, that as animals have, generally speaking, either to roam on the surface of the earth, in the liquid stream, &c., a solid support was necessary to sustain the machinery of their carcasses, and upon which the locomotive organs should be enabled to play.

This solid support may exist in the form of a skeleton, placed within the soft parts of the animal, or in the form of a shell, encasing it around, and thus having the soft parts in the interior, the density of this skeleton, or the shell, as well as its complexity, varying in different species as well as in different classes of animals, according to the peculiarity of their habits, localities, &c.

In every class of the animal kingdom, the author remarks, is found a skeleton, more or less compact, though not truly in every animal. As an example, may be adduced the polygastric animalcules, which possess only "an exterior, firm, elastic covering, which protects the more delicate internal parts. This covering sometimes consists only of a more condensed form of the common integument enveloping every part of the body; in others it forms a distinct thin pellucid sheath, into which the animal can withdraw its soft parts for protection."

The present work does not admit of an analysis; our remarks upon it can only be general, and our extracts from it few in number.

The osseous system of every tribe of animals beneath man is fully described, and every part, a description of which cannot be accurately conveyed in language, is faithfully represented by neatly executed wood-cuts.

Skeletons of the different classes of animals are drawn so as to give a fair outline of the bones.

The "Chapter Second" is on the "Organs of Attachment, or Ligaments." It is concise, but contains a large quantity of matter in a small bulk. We shall present a part of its substance. Every bone of the skeleton, whether it be contained in the interior of the animal, or exist upon its surface, is united to its neighbouring ones so as to preserve them in apposition, and to facilitate the freedom of

their motions upon each other. The ligaments, the cartilaginous coverings of bone, and the bones themselves, are endowed with a low degree of vitality, and this deficiency, or lowness of vitality, is obviously dependent upon the scanty supply of blood-vessels and nerves; in proportion just is their sensibility. This is a broad principle, a maxim which future physiologists will receive as a truism. The various modes in which the pieces of the skeleton are united, are graphically described; some, as the higher order of animals, have ligaments, cartilages, fibro-cartilage, and synovial membranes; the ligaments in those classes are firm, dense, and resisting, and are so disposed as to prevent displacement of the bones in the directions they are liable to occur. The cartilages are thick where they invest the centres of convex surfaces, and thin at the margins, where they line cavities, thin in the centres, and accumulated at the margins; in all cases the fibres are arranged in the axes of the limbs.

“In the lowest tribes the component pieces of the skeleton are held together by the simplest mode of union, they have not their points of contact protected by a layer of soft cartilage, lubricated with synovia, and connected by capsular ligaments and internal ligamentous bands, they are partially, or entirely, imbedded in a common, tough, connecting matter, which, by its elasticity, admits of the few required motions. No articulations or ligaments appear in the soft gelatinous transparent bodies of the animalcules, but in the poripherous animals the dense silicious and calcareous spicula, which compose their solid framework, are supported and maintained in their positions by a more tough, elastic, and firm portion of the general cellular tissue of the body, perhaps stimulated to condensation by the presence of these earthy crystalline bodies. By the motions of the body, produced by external bodies, the points of these sharp spicula are made to project from this tough connecting matter in various directions in the gelatinous surface of the body, from the margins of the pores, or into the internal canals. The tubercular filaments in the horny species anastomose with each other freely throughout the whole body, like the continuous connecting matter in the earthy species. The jointed appearance seen in most flexible tubular keratophytes, as *sertularia*, *plumularia*, *campanularia*, is confined to the exterior covering, and does not interrupt the course of the fluids circulating through the enclosed fleshy part. These thinner portions and annular strictures of the horny covering allow of the more ready development of new branches, cells, or vesicles, and of the incessant movements of all their parts, produced by the ever restless sea. The branches of the *collaria thuyra* drop off regularly from below upwards along the stem, at these apparent joints. The minute calcareous spicula of many corticiferous and fleshy zoophytes, as *gorgonia*

and *lobularia*, are connected by the general cellular substance of the body. The black, flexible, elastic matter deposited in concentric layers between the calcareous internal solid pieces of the *isis hippuris*, are merely uncalcified portions of the common animal matter which prevades the whole skeleton, and connects all its earthy particles, they are like the uncalcified portion of *corallina*, but are secreted, as the calcareous matter of the skeleton by the enveloping fleshy crust. The exterior sharp spines of pennatulæ are connected and moved by the coriaceous irritable skin of the body. The skeletons of zoophytes, as those of the higher testaceous animals, are insinuated into the minute inequalities of the surface of rocks, and thus adhere firmly, by being exuded in a soft semifluid state, and then condensing.”

“CHAPTER III.—On the Muscular System, or Active Organs of Motion.”—The muscles are the agents by which we move to and fro, by which voice is produced, and all the voluntary actions are performed. What are the agents of animal motion?—We reply, muscles. What is the character of muscles?—A series of fibres arranged in a parallel direction, each fibre being composed of a series of globules, agglutinated or united together by some plastic yet unknown power—undiscovered property. Do all animals possess the faculty of motion?—Unquestionably they do. Does the same linear arrangement of particles, of globules, obtain in every animal?—Dr. Grant and other comparative anatomists say no. He says,—“In the lowest tribes of animals, in which the slowly irritable fleshy substance appears as a soft, homogeneous, cellular tissue,” all linear arrangement is imperceptible, being lost, nothing appearing but a soft, homogeneous substance, in one animal presenting all the condition of interlaced, web-like, cellular tissues, in another a mere pulpy, gelatinous mass; yet all have motion—all have the interesting prerogative of being capable, if not of roaming abroad, yet of active mobility.

The connexion between the muscular vigour of an animal and the energy of its respiratory function is next discussed. The more vigorous the animal, the more rapid or the more perfect is its respiration. This is a truism no one will doubt. The present part is concluded, we presume, in the middle of the subject of muscular phenomena. It is an interesting subject, and fraught with delightful circumstances.

We have thus much noticed the work before us, and the interesting topic upon which it treats. It now remains for us but to observe on the merits of the first part of this work. In doing so, our comments shall be devoid of partiality—shall be free as air. Comparative anatomy is a branch of science which may be made highly fascinating to the public, and attractive, interesting, and useful to every member of the medical profession. It admits of all the captivating ornaments of rhetoric—

the effusion of imaginative language; but, on the other hand, it should not be obscured in pedantic, verbose, and elaborate phraseology. These observations the learned author will no doubt read, and we believe with advantage, if not to himself, to his work. Few men understand comparative anatomy so well as Dr. Grant; few have the same power of combining the apparently heterogeneous materials which compose the science; but we must confess our opinion, that no one could have made the subject less interesting, less attractive. The language is powerful, and sometimes approaches to eloquence, but too frequently it is verbose; sentences are filled which, though they may please the ear of some by sacrificing the sense, will often offend the judgment of the few.

Nevertheless, even with this fault, the work is excellent. It will be read, however, only by those who are previously acquainted with the subject; we pretend to be so, though we do not teach this branch of science. A student, a tyro in science, would derive little benefit and much less interest from the work; it is too much on the advance of the present day; future ages will accord its merits.

A Treatise on Headachs, their various Causes, Prevention, and Cure. By G. HUME WEATHERHEAD, M.D., &c. &c. Highley.

THE present little work is dedicated to one of the greatest naturalists of the present day, Geoffroy St. Hilaire, as a tribute of esteem which the author entertains for that individual.

When we say that headach is one of the most frequent and troublesome maladies to which man is liable, we shall have the sentiment echoed by the whole profession. It is a disease erratic in its nature, and so untractable, that though one mode of treatment may succeed in one case, in another apparently identical, the same measures will be like throwing chaff to the wind. The Protean-like character it assumes, the shades of difference it presents, render it an intangible, an uncertain disease. Above all other complaints, perhaps, it puzzles the ingenuity of the practitioner. If Dr. Weatherhead has unravelled even some of its intricacies he will have performed a great achievement. Whether he has done so or not remains to be determined by the reception and appreciation of the work.

The work is prefaced by some general observations on the circulation of blood through the brain, the nature of its machinery, the growth, development, &c., of the various parts of the brain are alluded to, its relative sizes in individuals of different countries are discussed, in which the sentiments of the author accord pretty nearly with the accredited doctrines of the day. Instinct and intelligence are adverted to, and their difference shown.

In the 1st section is examined the nature of "Dyspeptic or Sick Headach;" 2nd, of

"Nervous Headach;" 3rd, of "Headach from fulness of Blood;" 4th, of "Rheumatic Headach;" 5th, of "Arthritic Headach;" 6th, of "Headach from Organic lesion;" and, subsequently and lastly, are given the "Rules and Observances for the Prevention of Headach; Clothing, Exercise, Diet, Early Rising, Obviating Habitual Constipation, Regimen of the Mind, Effects of Travelling." Each topic is treated upon in a very lucid and scientific manner. We have been highly interested with its contents: it is assuredly the very best treatise on the subject, and should be read by every one affected with headach, inasmuch as it tells what measures should be adopted for the removal of the malady, and how to avert its aggression.

Report presented by the Council to the Sixteenth Anniversary Meeting of the Hunterian Society. 1835.

WE have been highly gratified with this Report. Its objects and utility are unfolded in the preface; it is to present the Members of the Society and the Profession with a concise yet perspicuous outline of the results of the proceedings during the preceding year. The advantages of those societies are incalculable,—varied talent and experience are brought to bear upon one point. The abstract of the cases presented to the society and of the essays read is of considerable interest. We shall cull a few of them for the benefit of our readers:—

"*Nervous System.*—A paper was read on the distribution and functions of those nerves said by Sir Charles Bell to derive their influence from the tractus respiratorius. The author adverted to the fact, that the sympathetic nerve is formed before any other part of the foetal animal, so that at birth the functions of assimilation, circulation, secretion, respiration, and voluntary motion are under its government. The author endeavoured to show that the precise central origin given to the respiratory nerves does not exist, but that the peculiar powers of those nerves are derived from their connexion with the sympathetic. An interesting discussion, in which some experiments and physiological observations were adduced, in corroboration of the author's opinions, ensued on this communication.

"*Heart.*—instance of hypertrophy of, with ossification of the mitral valves. In this case there was pulpiness of the mucous membrane of the stomach and bowels, and a loaded state of their vessels, which, with some suspicious circumstances preceding death, led to an apprehension of poison. It was shown, however, that such appearances in the alimentary canal are not unfrequently observed after death from disease of the heart.

"*Heart ruptured.*—several instances alluded to, in some of which the patients lived twenty-four hours. In others death was instantaneous. The rupture most frequently happened in the left ventricle.

"Aortic valve,—instance of its rupture in a boy, from his being frightened at the report of a pistol. He instantly felt pain at the region of the heart, soon became dropsical, and died in a year and a half.

"Lungs,—a paper was read on the question whether the parenchyma of the lungs, or the lining membrane of the cells, is the seat of pneumonia. The author believed that what is called inflammation of the substance of the lungs, or pneumonia, is not inflammation of the parenchyma, but of the membrane lining the cells. Also that the inflammation is of two kinds, the plastic and non-plastic, with intermediate varieties. In the former, organised lymph is thrown out; in the latter there is a grey secretion, which gives the diseased portion the name of grey hepatisation, and is much like Castile soap. The products of this inflammation are unorganisable. These two conditions are said to differ, *ab initio*, and to require different treatment—the plastic bleeding and mercury, and the non-plastic stimulants.

"Intestine,—case in which the duodenum was perforated by an ulcer. The patient had resided in warm climates, and was attacked two hours after supper with acute pain in the epigastrium, and about the right shoulder. There was scarcely any affection of pulse. The contents of the intestine and stomach had escaped. The differences between rupture and perforation were alluded to. It was stated that in rupture the mucous membrane invariably curls over the rent peritoneum, but in ulceration the lesion of the mucous membrane usually extends beyond that of the serous. Ulceration of the bowels was considered of frequent occurrence in persons who resided in hot climates. Rest and opium were considered to afford the only chance of closing the opening, whilst the inflammatory stage is to be relieved by venesection.

"A few cases of ulceration of the duodenum were mentioned, in which obstinate vomiting had preceded death. Other instances were related in which the adhesive inflammation had limited the effusion.

"Intestinal hæmorrhage,—with immense discharges of muco-purulent matter.—A case was related in which alum injections, and acid astringents by the mouth, had been serviceable.

"Liver,—a large hydatid cyst of, was exhibited to the Society. The female from whose body it was taken was sixteen years of age. It had been several years in formation, and hæmorrhage from the bowels took place before death. The cyst was attached to the right side of the liver. Its outer covering was formed of the peritoneal coat of the liver, and within this was a second cyst which contained three hydatids.

"In another case a young woman had enlargement of the right side. At length she began to expectorate small hydatids, tinged with bile. This expectoration continued for three months, and then she recovered.

"In another instance small nodules were felt over the hepatic region. They disappeared by purging. It was supposed that they were hydatids, and had passed by the biliary ducts.

"The question of treatment involved considerations as to the safety of tapping, or of opening the cysts more freely. By some it was thought tapping would hazard great constitutional irritation, and, perhaps, suppuration and sloughing of the sac. When these cysts are near serous cavities, it was considered as, usually, better to let them alone, unless a free exit can be given to them. A case, however, was related of the successful removal of three quarts of colourless fluid from an hydatid cyst by trocar. The patient was greatly relieved for a year and half. Then came on cough and expectoration, and he died. The liver was changed into irregular clumsy masses, so that with its greatly thickened peritoneum, its natural character could not be discovered. It was converted into two thick cysts, containing very numerous large and small hydatids, the lower cyst was firmly contracted on several dead hydatids, and in the upper cyst there were numerous living hydatids. This upper cyst communicated, by an aperture through the diaphragm, with the right lung, where there was a large abscess containing shrivelled hydatids.

"It was mentioned that spontaneous cure sometimes occurs. The hydatids shrivel up, the cyst contracts, and remains dormant unless inflammation be excited, when the whole cyst may slough. Two fatal instances of this nature were adverted to.

"Could it be ascertained that adhesion had taken place, it was thought it would be safe to open with a scalpel.

"The importance of correct diagnosis was pointed out, and in aid of this it was mentioned that the specific gravity of the fluid of ascites is to that of hydatids as 1014 to 1001, and that the fluid of hydatids contains no albumen.

"*Veratria*,—some cases in which it failed to give relief, others which it had aggravated, and some in which it had proved beneficial; but the concurrence of testimony was, that its powers had of late been unduly extolled.

"*Colchicum*,—an extract of the acetate was mentioned as deserving of high commendation; and the powder of the root, in doses of five grains, was reported as an efficient form of the remedy. The addition of quinine had been found available, when either apart had not succeeded.

"*Iodine* was brought under observation as a valuable remedy in secondary syphilis, and in affections of the skin and throat where mercury cannot be used. In one case of two years' standing, the utmost advantage had resulted from one grain of iodine and ten of hydriodate of potash, with sarsa, twice a day, for a month."

FOREIGN MEDICAL LITERATURE.

REVIEW OF THE GERMAN JOURNALS.

1st. *Death in consequence of Fasting.*

BY PROFESSOR DE WALTHER.

THE Professor of Munich reports a case of a man, 29 years of age, whom he attended for amaurosis, and who was afterwards under the care of an individual who undertook to cure him by fasting. M. W. B. de D— for some weeks took no solid food whatsoever, and nothing but water, except an occasional cup of tea. His body, weighing before this treatment 130 pounds, was speedily reduced to 97, and to a state of complete emaciation. He died of nervous apoplexy, without having been cured of his amaurosis.

Post Mortem Appearances.—Total want of blood; secretions serous and bilious, regular; between 8 and 10 ounces of serum in the pericardium; the lungs dotted with a great number of tubercles, some of which were approaching a softened and ulcerated state; no inflammation in the intestines, which were contracted and shrunk throughout their whole length, especially at the transverse colon; all the organs of the chest and abdomen in a state of atrophy; the brain and spinal marrow were healthy.

2nd. *On Tumours of the Larynx.*

BY PROFESSOR ALBERS DE BONN.

Hydatids.—The greatest number of cases of hydatids of the larynx admitted by the ancients, and those specifically described by Ploucquet and Lentin, cannot be other, in fact, than œdema of the larynx. Cases of true hydatids are reported by Aubertin, *Essai sur l'Ulceration du Larynx, Journal de Médecine*; Otto, *Handbuch der Pathologischen Anatomie, Breslau*; Delormes, *Journal Générale de la Société de Médecine*; Harless, *Neues Journal der Ausländischen Medicinische, Chirurgischen, Literatur*.

3rd. *Encysted Tumours.*

One case only exists, and that is reported by M. Albers, in his Monography; the fact is curious, and proves the benefit to be expected from laryngotomy. Polypi are frequent; reported cases are given by Zwinger, Morgagni, Lieutaud, Herbiniaux, Desault, Voigtel, Otto, Wendt, and Prinz, in *Wöchentliche Beiträge der Medicinischen und Chirurgischen Klinik*, and by Drs. Clarus and J. Radius. M. Urner gives the following report as taken from M. Albers.

Joseph T—, a joiner of Bonn, aged 54, was in childhood affected with swelling of the glands of the neck, which subsided, and by a dry cough, which continued. Eleven years ago, after a fall, inflammation and hepatitis succeeded. These symptoms, except the dry cough, disappeared by antiphlogistic treatment,

and were followed by sanguineous expectoration, vertigo, pains in the frontal bone, general weakness, and, above all, great suffering under the left clavicle. Bleeding and Seltzer water with milk.

In the course of a few weeks he was able to pursue his employment, but six months afterwards was suddenly seized with swooning and spitting of blood, nearly seven pounds within the space of three days. Bleeding and common salt. The hæmoptysis ceased, but the following symptoms appeared; cough increased; expectoration yellow, abundant, and purulent; agitation; loss of strength; pains in the neck; voice hoarse. Three weeks afterwards he attended the Clinique at Bonn, his state thus:—hæmoptysis habitual; the neck long; larynx very protuberant; the colour of clay; aphonic; pain on pressure of the larynx and when speaking; exterior configuration of the neck normal; cough very frequent, with a hollow sound; sanguineous expectoration, yellow and foetid; respiration very short and difficult; no sound of it under the left clavicle, but sometimes a hollow rattling, and a bawling cry when speaking; urine copious and clear; pain sometimes in the lower region of the abdomen, which yielded to the salt; scarcely any appetite, but an inclination for acid aliment; pulse frequent; feet œdematous and painful; skin burning; sleep tolerable; general wasting of the flesh; an issue in the arm.

An abscess in the upper surface of the left lobe of the lungs was prognosticated, inflammation with exudation of the glottis and larynx, and inflammation of the intestinal mucus. To cupping, cataplasms on the abdomen, mucilaginous drinks, infusion of digitalis, and hydrocyanic acid, the most alarming of these symptoms yielded; a seton was then made at the base of the larynx.

July, 1830, all the symptoms, except pain of the larynx, reappeared, and again yielded to treatment. During the interval, the patient suffered the issue and seton to close. July, 1830, cough very frequent; respiration difficult almost to suffocation, with a sensation of stoppage in the tracheal artery; no pain in the larynx; nocturnal sweats. A blister on the chest, with hydrocyanic acid, lessened the difficulty of respiration, and by October it was overcome, after hæmoptysis. Acetate of lead and an infusion of the seeds of water hemlock, which had before been tried, had no effect; an issue on the chest was made.

February, 1832, the symptoms returned with augmented violence, joined to a difficulty in swallowing, and a pain near the left projection of the os hyoides, pectoriloquy, though indistinct, might be heard as low as the breast; expectoration excessively copious, flowing, and purulent; and thus augmenting and diminishing the symptoms continued until March, when the patient died.

Post Mortem appearance.—Nothing abnormal in the cavity of the skull; the mucous

membrane of the larynx was of a greyish appearance, dotted, chiefly at the proximity of the glottis, with a great number of little lymphatic glands, tumefied, round, and whitish; larynx very large; between the two lower ligaments of the glottis was a small, round, fleshy tumour, about the size of a nut, hard to the touch, and adhering by a root to the cordivocale; immediately behind this tumour, and between the Morgagni ventricles, which were more separated than usual, was a hollow that, forming a partial receptacle to the tumour, lessened the obstruction in the glottis; the right ventricle almost entirely effaced, the left contracted, but still visible; the inferior ligaments of the glottis specially distended; the mucus surrounding the tumour near the glottis partly tumefied and thickened, partly covered over with little ulcers, presenting an appearance as if gnawed; the lower part of the larynx and tracheal artery sound; the thyroid cartilage partly carious near the hollow behind the tumour; thyroideal gland larger, and its lobes more developed than usual; pharynx and nerves of the neck sound.

Lungs.—An abscess in the upper part of the lobe of the left lung; tuberculous granulations in the right; abdominal viscera healthy, except the kidneys, a hydatid being formed in the cortical substance of the right, the size of a small egg, and on the surface of these organs were three hard tumours, partly sunk in the parenchyma, and internally resembling scrofulous glands.

4th. *Spongy tumour,*

Of indeterminate character, affecting a woman forty years of age, and much addicted to drinking and venery. The malady was of three years' duration, characterised by dyspnoea, which continually increasing ended in suffocation and death.—*Archives G n rales, August, 1821.*

5th. *Medullary Sarcoma.*

The following case, by Dr. Tortual, was first inserted in a Report on the State of the Anatomical Institution at Munster during the year 1830, and published by Professor Wutzer.

L—, an ecclesiastic, sixty years of age, complained, November, 1826, of a distressing sensation in his throat (supposed to be an affection of the larynx), accompanied by hoarseness and a cough, especially troublesome when speaking. Spirituous liquors, of which he was very fond, caused a burning sensation in the larynx; respiration tolerably free; fever towards night; emaciation; blister on the neck.

Inobservant of the prescribed diet, the patient was found, January, 1827, by Dr. Tortual, in the following state, with a hoarseness, which, eight days before his death, ended in aphony; pungent sensation in the region of the great cornu of the os hyoides, which was tumefied, and, when swallowing, he felt as if a pointed bone was sticking there;

this sensation, at times became insupportable; and, after coughing, the discharge was purulent.

Fourteen days before death the cough became convulsive, like the whooping-cough, and every minute threatened suffocation; it was generally increasing towards night, especially when lying on his back; the pungent sensation remarkably acute when swallowing anything solid, which he did with extreme difficulty, and it always provoked the cough, so that liquids were all he could take for some days preceding his death; at length he died, suffocated in a fit of coughing.

Post Mortem Appearance.—A medullary sarcoma, the size of a small nut, in the interior of the larynx, between the thyroid cartilage and os hyoides to the left and the epiglottis above the thyro-hyoid ligament; an opening led from this ligament to the tumour, part of which was filled with pus, the mass of the tumour was encephalous; the epiglottis and thyroideal cartilage were pushed away, the mucous membrane of the larynx ulcerated, and covered with a quantity of ichorous pus, and part of the Morgagni ventricles on the same side were equally ulcerated and, as it were, denuded.

6th. *Tumefied Lymphatic Gland in the Larynx.*

REPORTED TO DR. URNER BY PROFESSOR WUTZER, OF BONN.

W—, of Poesfeld, sixty-six years of age, had for some time experienced great difficulty in swallowing; solid food, in passing through the larynx, occasioned great suffering, nor indeed could it pass at all until it had undergone prolonged mastication; he became very thin; nothing abnormal could be discovered on examination of the mouth and oesophagus; exteriorly on the left side of the neck, at angles with the lower jaw and down to the clavicle, was a range of lymphatic glands, very much swollen, and large enough to press on the oesophagus and impede deglutition, caused, it might well be, by brandy, to which the man was much addicted; no trace of gout, syphilis, or scrofula.—Extract of water hemlock, sulphur of antimony, decoction of sarsaparilla interiorly, plaster of water-hemlock on the neck; these, continued for some weeks, caused some amelioration; he could swallow well masticated food without any great difficulty, but about a month afterwards an inflammatory fever took him off in the course of five days.

Post Mortem Examination.—Abdominal viscera sound; lungs adhering in many places to the costal pleuræ, gorged with deep black blood; tissue sound; in the valves of the aorta, and in the aorta itself, osseous depositions of different sizes. On the left side of the neck lymphatic glands tumefied and changed into sacs, filled with a yellowish viscid pus, the largest was found under the sterno-cleido-mastoideal muscle, and adhering, by means of a thickened cellular tissue, to the carotids and inner jugular

vein. The soft glands extended so far into the mediastinum that the last lay behind the second and third ribs, none of these glands could possibly press on the œsophagus; but an inspection of the pharynx quickly discovered the cause of the dysphagia; a softened lymphatic gland, the size of a small nut, was so adhesive, by means of the thickened cellular tissue of the right arytenoid ligament, that it entered the internal cavity of both larynx and pharynx, and of necessity caused impediment to the deglutition of solid food, which was thus compelled to pass over the tumour. It was remarkable, that his voice had continued clear, and his cough only that incidental to drunkards.

7th. Scirrhus and Cancerous Tumour.

We have yet no data from which we can prove the primitive development of scirrhus in the larynx; the tumours found in that organ having, it may be said, originated in the pharynx and œsophagus. Most of the cases, transmitted to us by the ancients, are, even by themselves, considered doubtful, so is that of Smyth's and Morgani's, both evidently of laryngeal polypi; but the latter has reported a case of real scirrhus of the pharynx, which had reached the laryngeal cavity; it is given by Lieutand from Valsalva. Otto cites an observation of Rudolphi's (*Historia Entozoorum*) relative to a scirrhus of the larynx, concerning the nature of which even the latter has a doubt. In fact, the anatomical disposition of that organ can scarcely predispose it to that sort of affection.

8th. Cartilaginous Tumour.

A case of this remarkable affection, developed simultaneously on the exterior of the neck and interior of the larynx, is given by Mr. Macilwain.—*Edin. Medical and Surgical Journal*, vol xxxv. A woman, between 50 and 60 years of age, exhibited all the symptoms of a diseased larynx; respiration difficult, almost to suffocation; thyroïdeale gland tumefied; a tumour on the right side of the sternocleido-mastoïdeale muscle. After all remedies had in vain been tried internally, Mr. Macilwain, with Drs. Houilly and Kington, resorted to tracheotomy. The incision in the neck discovered the branches of a large artery, the trajet of which was so small that there was scarcely an inch of space for the operation, it was therefore abandoned, from the difficulty of its execution in a space so narrow, and because the artery must have remained after the operation on the edge of the suppurating surface. She died of suffocation.

Post mortem appearance.—A tumour in the larynx, hard and almost cartilaginous, so closed up the glottis, that it is wonderful how respiration could be performed through a space so contracted as it left. The extraction of this tumour discovered a small cavity which communicated with the second tumour on the exterior of the larynx, and joined the left lobe of

the thyroïdeale gland; the artery seen at the beginning of the operation was the arteria innominata.

The above fact is a very convincing proof that in certain cases of diseased larynx, laryngotomy ought to supersede every other mode of operation; had it been resorted to instead of decosting, it would certainly have been successful. M. Albers points out a circumstance which often arrests the progress of this disease without having recourse to laryngotomy, namely, the tumefaction of the thyroïdeale gland, which is a general accompaniment of chronic affections of the larynx; the longer the malady endures, the greater the swelling.

9th. Verrucoid Tumours.

A physician of Belgium reports the following fact to Professor Wutzer, who communicated it to Dr. Urner. An architect of Liege, 40 years of age, of robust constitution, was affected with such difficulty of breathing, as to leave no doubt that there existed disease of the larynx. Every remedy internal and external was tried in vain. Dr. Brauers, assisted by M. Baud, Professor of Surgery at Liege, and Dr. Boersbrok, then performed the operation of laryngotomy: an incision being made anteriorly from top to bottom in the thyroïdeale cartilage, verrucoid tumours were found, which filled the cavity of the larynx; they were cauterised with nitrate of mercury. After the lapse of some days, the tumour had so much increased, especially where it had been touched that respiration was extremely difficult; the wound nearly closed; enlarged the wound, and extracted a fragment of the thyroïdeale cartilage. At length red-hot iron was used, which caused only slight inflammation of the interior of the larynx, but behind it was so acute as to prevent his swallowing a drop of liquid for three days. The inflammation subsided, but from the repeated irritations the larynx became one scirrhus mass. Acute hectic fever succeeded; and, though he is still living, no doubt can be entertained of its ultimate result.

10th. Other rare Tumours.—Calculi and Concretions almost unknown. (*Aubertin loc. cit.*)

Great attention should be given to exostoses, which, though rarely developed in the laryngeal cavity, are yet commonly found on the rim of the thyroïdeale cartilage, ascend towards the pharynx, and occasion difficulty of deglutition.—*Albers, Pathologie und Therapie der Kehlkopfkrankheiten. Leipzig, 1829.*

MARCH OF CONSERVATISM.

A WELL informed correspondent informs us that the Governors of Guy's Hospital have lately become so alarmed at the progress of liberal principles, that they have determined to exclude from the governorship all who are not decided conservatives. The present Pre-

sident, a Mr. Samuel Thornton, who has already a number of relatives governors, possessed of the proper Tory qualification, has proposed another member of his family. It is understood that the Right Hon. Secretary for the Home Department (Mr. Goulburn) is also to be proposed. This introduction of politics into charitable institutions deserves notice.

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OBSERVATIONS ON THE NEGLECT OF GOVERNMENT WITH RESPECT TO EMIGRANTS, IN NOT PROVIDING THEM WITH MEDICAL AID DURING THEIR PASSAGE TO OUR COLONIES.

WHILE the iron of Medical Reform is heating in the furnace, and preparing for the hammer of legislation to mould it into the best fashion, it appears to us, that they will most serve the general cause who expose to view, as soon as detected, any abuse having relation to the public health, since in it the profession are interested. In this way, by the contributions of many, a store of the trashy laws and regulations, which now clog and weaken the spring of our utility, will be collected to be sifted and dealt with, when the proper time arrives, as the wisdom of those placed in authority may deem fit. An ample stock of materials is desirable, that the amount of Reform may be commensurate with the necessity for it.

Being convinced of the efficiency of this plan we proceed, in furtherance of it, to offer, without more preamble, a few observations on the evils attending the transit of Emigrants from this country to our different Colonies, and to suggest their remedies. We are further induced to select the present moment as the best for our purpose, from being aware that, as the spring advances, the tide of Emigration will flow strongly from our shores, and give birth anew to the hardships and

calamities so strikingly exemplified in former years;—hardships and calamities so signally inculcating the supineness of the Government which permitted, and the mercenary, heartless avidity of those owners of ships engaged in the traffic, and their no less greedy satellites, certain of the ship brokers.

In order to give a clear view of our subject, we must separate Emigrants into two classes:—one possessing the means to ensure comparatively good treatment by engaging what is called a cabin passage; the other, either very scantily provided with pecuniary means, yet paying for their passage, or, a shade worse, shipped off as paupers at the parish expense; these two grades, being in the eyes of the traffickers very little better one than the other, are consigned to the horrors of the steerage indiscriminately. As these are the principal sufferers, and number as thirty to one of those who can afford the luxury of cabin accommodation, they demand our principal attention, and call most loudly for the sympathy of the philanthropist, and the protection of the legislature. Upon certain risks and dangers which affect all alike, embarked in the same vessel, such as its sea unworthiness, &c., we will not dwell, but proceed to give a brief description of the mode adopted by the caterers for Emigrants to ensure that first of requisites to them,—their health. To be short, then, they do not consult this point, except in a very small degree. Their business, as some of them have expressed it, being to get a shipload of living beings, and something like a ship in which to launch them forth on their dreary voyage. The sum of from 5*l.* to 7*l.* per head, as the case may be, is demanded for a passage in the steerage to Quebec, and this obtained, the matter of furnishing proper berths,

wholesome provisions, and medical attendance is left out of sight, a crime, for neglect we cannot call it, which has devoted, and will yet, if unrestrained by law, consign to the jaws of untimely and wretched death thousands of inexperienced and confiding victims. The passage to any part of our Australian Colonies is conducted upon similar principles of misanthropy and wreckless culpability. All who notice passing events must have learned this fact from the accounts sent home, by surviving unhappy passengers, to this country.

For the instruction of those who have not inspected a vessel, prepared for the purposes of emigration, we give the following sketch of its accommodations, &c.

The speculation being determined upon, a vessel is sought, no matter how crazy, so that it does not actually leak; this is either bought or chartered; if there be already an orlop, or under deck, originally formed to strengthen the ship and separate its cargo (if there be none a temporary and weaker one is built), on it, without more ado, is constructed a range of what are (facetiously?) called berths; these extend generally from abaft the mainmast to the forecabin, or foremost part of the ship, a length varying with the size of the vessel, from forty to a hundred and twenty feet. The berths are formed of deal plank, are about six feet in length, but as for breadth, woefully curtailed, being very little more than the width of an ordinary sized man's shoulders, from point to point. These are arranged in double tiers, so that the uppermost is elevated above the lower about three feet, often less, according to the height between decks. The latter is within an inch or two on a level with the lower deck, and for this reason would, in case of a heavy sea being shipped, when the hatch was left open, be sure of an

effectual swamping; an affair, by the bye, not so easily remedied when sea, as when fresh water is the agent, for the salt being left, after evaporation, in the articles soaked, imbibes afterwards, whenever the atmosphere is loaded with humidity, a portion of the latter, and thus gives rise to many diseases. These tiers of berths, attached to the sides of the vessel, are again subdivided into two *steps*, one about six inches above the other, so that four individuals at least are crammed into a box, consisting of somewhat more than four feet in breadth, six feet in height (at the utmost), and six feet in length.

Into these holes the steerage passengers, at night, or when fatigued, retire. If the weather be fair, and the hatches open, something like a current of air purifies the noxious medium, perfumed with a thousand scents, they breathe; but if, as happens for many days together, upon nearing the North Western coast of America, foul weather should prevail, the hatches are then put down, and the steam arising from so many sweltering bodies, by exhalation from the skin and lungs, pervades the confined space, and poisonous that mainspring of life, the air which surrounds them. Those placed uppermost, in the villainous dormitory, suffer most from the heat evolved, while their undermost companions in misery are more subjected to the deleterious effects of the carbonic acid, thrown off in abundance by the transudation and respiration of so many. If tired of this they seek the deck, their scope of action there bears a strict analogy to that below. From the mainmast to the bowsprit they may travel, that is along the gangways of the vessel, a space always confined and narrow,—on the quarter-deck they must not venture, for *there* exist privileges and

vested rights, the master, his satellites, and the cabin passengers are alone allowed to luxuriate there.

So much for the poor emigrant's lodging; let us take a glance at his board; and here the rapacious wrecklessness of the parties contracting to supply it needs an ample exposure. The provisioning of a vessel destined to this *traffic* of human suffering is limited to the smallest quantity that avaricious calculation can make *apparently* sufficient, for *actual* sufficiency is disregarded (the ship once afloat and on the open sea, responsibility is virtually at an end, or so frittered from owner to master, and from the latter to his petty comrades called *officers*, that security there is none for the living cargo);—we say *frittered* to the smallest modicum capable of sustaining the lives of the passengers during a passage, calculated not at an average, but at the quickest. The stock of provisions is laid in at the lowest estimate,—and such provisions! and managed so adroitly! Until the vessel is at sea a better commodity is distributed; but once upon the ocean, where there is no law but force, no alternative but submission, and the better part of the stock disappears, and leaves either a “hiatus valde deflendus,” or a collection of *combustibles*, for of eatables they deserve not the name, which the poor swindled passengers may well contemplate with dismay,—biscuits decayed and replete with mouldiness and weevil—putrefied provisions in the shape of lumps of decomposed salt-beef and pork which have passed the ordeal of half-a-dozen voyages—the refuse of some paid-off man-of-war—vegetables, none—a scanty supply of water and fuel—and no cooking. These are the comforts which, when he needs them the most, are presented to the astonished and sickened emigrant! Take them he must, or none.

Those who survey a vessel fitted up for the purposes of emigration, before its leaving port, may for a moment admire the neatness and precision of the deal boxes alluded to, fitted up like so many coffins for the reception of their departing friends. *Then*, the smells which will thereafter arise, are not brought into action. A freer circulation of air by means of windsails, &c. *only looked to for the moment*, is kept up. The not unpleasant odour of the fresh cut pinewood is in their noses, and they deem in their innocence that the tarts and cheesecakes they behold will endure for the voyage. But vanity of vanities! nothing can be found more empty. Once at sea, and stiff northwesterers blowing (they blow pretty lengthily, as well as stiffly), and the confectionary of the scene vanishes. Noisome stench, conjured up by the pitching and lurching of the “good ship,” infect the circumambient air. Sea sickness drives into the suffocating steerage, or hold, sufferer after sufferer, and in an incredibly short period its tawdry neatness is converted into the livery of disease, of loathing, and disgust. Add to these disagreeables, the Jack-in-office *hauteur* of the petty louts calling themselves Captains, chief officers, &c., forsooth, the execrable and scanty food doled out, and the picture is sketched; to *paint* it would require an abler hand.

Prepared by what has been said, our readers will not be surprised to know that an address of remonstrance to our legislature, has been forwarded to this country by the people of Quebec, deprecating the further wholesale exportation of ill provided for, half famished, and diseased pauper emigrants to their shores. They complain that, holding out a prospect of gain to them, by encouraging the emigration of able-bodied labourers into their territories (of whom alone they are in

need), we burthen them, under the pretence of so doing, with our sick and diseased; that we have inflicted the visitation of blue cholera on them, and loaded them with the refuse of our parishes. They add that we have shamefully neglected the medical superintendence of our vessels destined to convey emigrants to them, and reproach us deservedly with the consequences.

These are grave charges, and to a certain degree just, and traceable almost altogether, if not entirely, to the deplorable state of the policy of our laws with regard to emigration. Let us examine by what laws the emigrant is protected when, voluntarily or induced by adverse circumstances and the hope of better fortune, he quits his mother-soil. Every one must grant that the die is cast heavily enough against that man whose misfortunes or poverty drive him, without a crime, to forsake the land of his birth. Every one must grant that at his farewell every indulgence, every safeguard which his more fortunate countrymen are able to afford, should be thrown around him as a shield, and the bitter moment of his final divorce from the hearth of his fathers be rendered as palatable, as encouraging as circumstances will permit. Is it so?—Let the impunity with which this class of men have been allowed to be pillaged and fleeced by designing agents and their merciless shipowning principals—let the scenes of disease and death occurring from want of proper restrictions, particularly as respects efficient medical supervision on board the vessels they embark in—let the starvation they endure during and after their voluntary transportation—let the half-sinking wrecks, furbished up for this service in London, Liverpool, and in the ports of Ireland, where life seems to be at a discount, appear in evidence,

answer the question, and shame the legislature.

It is true that, after much mischief had been done, something with the name of an agent was appointed by the government to inspect (we believe at Liverpool, whence the greater number of emigrants shipped themselves) the rickety hulls appropriated for their conveyance; but his vigilance availed nothing; it was evaded, and a more effective blockade upon the operations of the speculators in human life is called for. It is plain that merely inspecting a vessel, and seeing that certain crevices are filled up, and sundry pieces of plank nailed so as not absolutely to choak such as are obliged to sojourn within them, is not all that prudence and humanity require, when a number of passengers of both sexes and all ages are concerned. A proper *medical* inspection before sailing, and *medical* assistance during the passage should be provided. A clear report of the seaworthiness of the vessel should be first made by a surveyor appointed to that duty by government. Following this should come the report of a well-skilled medical inspector, describing the number of passengers, taking into consideration the contingencies likely to occur during the passage, and also the space in height, breadth, and length of the ship, which it might be allowed to convey with comfort and safety, so far as regards health. The next step should be, after the number of passengers is secured, to calculate the amount of provisions necessary, on a liberal scale, allowing for detention at sea from adverse winds, &c.; and, finally, a properly qualified surgeon should be engaged at a settled remuneration, calculated in the compound ratio of the number of passengers and the length of the voyage. The surgeon in this case, as in that

of a convict transport, should have the superintendence; and be responsible for the fulfilment, of certain instructions to be given him on embarkation. The master of the vessel should be charged merely with its navigation.

Under such regulations, a new and satisfactory aspect of affairs would be seen. We should not again hear of a mass of helplessness and pestilence being landed on our colonial shores. Our legislature would be acting that dignified part which becomes it towards the adventurous but less fortunate portion of its exiled subjects, and these, instead of hurling back the bitter reproach which they now do in defiance, would feel grateful that their last parting was one of cordiality and decency. In fact, a large share of bad feeling and enmity would be done away with, and our colonies, and the cause of humanity served.

Doubtless, were an interested ship-owner to peruse such a code of regulations, he would stand on tiptoe to pronounce *his* anathema against them; but shipowners—we mean the sordid class engaged in this villainous traffic—and justice and humanity differ *toto cælo*. Their tricks in this nefarious way it shall be our care to look after in future, and expose as we detect them: for the present we assure them that we are aware of the mean-spirited and paltry manner in which they obeyed the order in council made some three years ago, when the prevalence of cholera induced the government to issue orders that a surgeon should be provided for every ship carrying out passengers. In the first place, they evaded the order as much as in them lay; in the second, they engaged such striplings in the profession and needy half-educated adventurers, as they could persuade to give their service in lieu of a passage

which *they* represented would, at its conclusion, introduce them into a land flowing with milk and honey, but which they found barren and profitless; and, thirdly, when they found that flesh and blood would bear the insult, they petitioned the Government to rescind its salutary order, one of its wisest, and permit them to carry on their trade of disease and death without restraint. All this they did, and more will they do in the same strain, unless bound down to deal as honest men should deal, to give an equivalent for the money they receive from those who entrust their lives to their care.

The nonsense which interested individuals may oppose to the employment of medical men, such as that the remuneration afforded them would enhance the price of passage to the emigrant, is scarcely worth notice. A calculation of the profits arising to speculators in this traffic, would be the best answer. Our limits do not at present allow us to enter into it, but in a future number, perhaps the next, an *exposé* of their receipts and disbursements shall be given to our readers. In the meantime we assert, without fear of contradiction, that, according to the prices they charge, they might afford better treatment of every description, pay a medical superintendent upon the passage, and pocket, after all, enough to induce a more honest race of men to embark in the same speculation.

THE BRENCHLEY CASE OF LITHOTOMY.

WE have, from the first, been in possession of the leading features of this case, which has for the last few days been darkly alluded to by many of the London and country Journals. We, however, did not feel warranted in noticing, or offering any comments upon it, until further au-

thenticated. We have now to inform our readers that an examination of the parties implicated, the Rev. — Arthur, Mr. Monckton, surgeon, and Thomas Russel, master of the workhouse, in which the boy operated upon (James Roberts) was a pauper, has taken place before three magistrates, at Tunbridge Wells. The evidence is now before us, but our arrangements will not permit of our laying it before our readers, or commenting upon it in our present number.

It appears, from the evidence, that the boy Roberts was unwilling that the operation should be performed upon him, that there was much difficulty in getting him to submit to it, and that he showed great stubbornness when ordered into the Committee-room for the purpose.

It appears that Thomas Russel, the master of the workhouse, was desired to fetch the boy: this he did. Subsequently, *four men*, whose names are mentioned, were ordered to *hold the boy down* while the operation was being performed! Mr. Monckton, after making the usual incision, succeeded in extracting, with his finger and thumb, a small *stony* substance about the size of a pea, but very *soft*! Mr. Arthur assisted in the operation.

The magistrates, after consulting together, said they did not consider this to be a question of surgical skill so much as one of assault; but, in order that they might give an impartial hearing, they adjourned the case to the next day. On this day the parish officers of Brenchley attended pursuant to summons. One of the overseers said, he resolved with one of the parish surgeons (Mr. Outeridge) that Mr. Monckton should not perform the operation, as he had determined that a Mr. Hargraves should perform it, Mr. Monckton having failed in a former attempt upon the boy's bladder. This overseer

admitted, *that if Mr. Monckton had not called to see his children he should not have spoken to him upon the subject of the boy's infirmity.* He also admitted, that if the boy had been attacked by any casual illness, he should have considered him under Mr. Monckton's care. He also gave Mr. Monckton and Mr. Arthur a good character. Mr. M. said that he examined the boy, and on finding the stone was in the passage he made an incision, with the hope of extracting it, but it slipped back into the bladder.

One of the magistrates, on behalf of himself and brother magistrates, then addressed the defendants, stating that they fully acquitted them of the charge of treating the boy ill, or of trifling with his feelings; that, as far as Mr. Arthur was concerned, they dismissed the case altogether, but felt it their duty to send Mr. Monckton's case to the Sessions. A serious reproof was administered to the man Russel, Master of the Workhouse, for his dereliction of duty in not protecting the boy, and the different parties were bound down to appear at the assizes on the 17th. inst. We refrain from any comments at present, but congratulate all who are lovers of freedom and haters of undue coercion, that a jury will have to decide the case.

PORTRAIT OF DUPUYTREN.

WE have been favoured by Mr. Renshaw, of the Strand, with the view of a half length portrait of this, not unaptly named by his countrymen, "Colossus of Surgery." It is exceedingly well executed in lithography, from a drawing by the talented Mourier. We had no sooner fixed our eyes on the portrait, than its exact resemblance to the eminent and lamented original, whom we had formerly seen in Paris, struck us. His lofty and expanded forehead, the commanding eye, for which Dupuytren was conspicuous beyond his confrères, and the nobly formed features beneath, are finely depicted by the artist, who seems, in addition, to have caught and delineated with peculiar happiness that expression of indivi-

duality so difficult to paint, but without which a likeness is cold, spiritless, and devoid of interest. By those who admired this truly great man, equally adorned by excellence of talent and unbounded philanthropy, this resemblance will be highly prized. It is a faithful memento of the illustrious dead, fraught with his living characteristics, and ought to have a place in the study of every lover of our profession.

Foreign Medicine.

Function of the Optic and Olfactory Nerves.
M. VIDAL has communicated to the Anatomical Society of Paris, a case of fungous tumour of the dura mater, at the base of the cranium. The optic and olfactory nerves were compressed and destroyed by the tumour, whilst the fifth pair remained perfectly unaffected; vision and the sense of smell were destroyed. This fact confirms certain experiments of M. Magendie, from which it results that if the trifacial nerve is necessary to vision, at least it cannot be considered as the exclusive organ of this function. It also tends to prove, in opposition to the opinion of the celebrated physiologist just alluded to, that the olfactory nerve enjoys the same prerogative as the optic, in relation to the sense to which it transmits impressions.—*Compte rendu des Travaux de la Soc. Anat.*

Amnesia.

M. Cassan has communicated to the Royal Academy of Medicine of Paris, the following interesting case of cerebral disease, with the loss of memory of words. A man was attacked with hemiplegia, which was relieved by bleeding and blistering. Shortly afterwards he experienced incipient amaurosis in both eyes, with pain in the head, and noise in his ears. After some time hemiplegia returned. The patient then lost the memory of words, so that he could not name the most common things; his mind in other respects was unimpaired, and all the organic functions were properly performed; he could also read fluently. He remembered objects, for he drew them upon paper, but he forgot the names by which they were called. The sight of a female whom he loved excited him, and momentarily restored the faculty of language he had lost. He complained of insomnia, heaviness of the head, difficulty of muscular action, weakness of sight, hearing, &c.

This case is analogous to that of the notary, recorded by M. Pinel in his Nosography, who, after an attack of apoplexy, forgot his own name, that of his wife, and of his children, but remembered the places where his clients' briefs were deposited. M. Larrey has also related an instance of the loss of memory of words following a wound. Professor Broussonet has also recorded an instance in which there was a loss of memory of substantives, while that of adjectives was preserved; it followed apoplexy;

and a similar case is recorded by Dr. Cambert in the *Journal Complémentaire* for February, 1819.

Foreign Hospital Report.

HÔPITAL DE ST. ANTHONY.

Case of complete absence of the Cerebellum, together with the Posterior Peduncles and Protuberances of the Cerebrum, in a Young Girl who died in her 11th Year.

Alexandrine Labrosse was born at Versailles, in May, 1820. Her father was of a strong and robust constitution, her mother, on the contrary, was a weak and unhealthy woman, and accustomed to excesses of every description. When born, the child was extremely feeble, but well formed; she continued extremely delicate and puny, and grew but slowly. At two years of age, she had not cut her first teeth, and it was not until she was three years of age that she could lisp a few words. M. Miguel, who communicated these particulars, saw her for the first time in 1829, when he was informed by her father that she was five years of age before she could stand alone. He was astonished at her small size, and remarked particularly the great feebleness of the extremities. This symptom, joined to the want of intelligence in the child, and the impossibility of her articulating a word clearly, had induced M. Miguel to suspect some injury in the brain. He was several times called upon to prescribe for gastrointestinal irritation, although these presented no remarkable peculiarities. The last time he saw her, which was after her ninth year, he found the pupils extremely dilated, from which he was led to suspect the presence of worms in the intestinal canal. He was about to direct anthelmintics, when the nurse informed him that the little patient kept her hands constantly applied over the genital parts.

On the 12th of January, 1830, she was admitted into the Hôpital des Orphelins, as a forsaken child. Her certificate of admission represented her as paralysed in the abdominal extremities, speaking with difficulty, and that her disease was owing to a fright experienced by her nurse.

In the letter addressed to the superintendent, requesting her admission, M. Miguel observes, "this little girl, although nine and a half years old, in consequence of the poor nourishment and little care she had received, is scarcely as large as a child of six years; this cause has arrested the development of both her physical and moral faculties."

At the time of her entrance into the Orphelins, she was feeble, cachectic, and possessed of very little intelligence. Apparently indifferent to every thing surrounding her, she nevertheless manifested friendship and gratitude for those who rendered her any attentions. When spoken to, she replied with

difficulty and hesitation. Her limbs though extremely feeble, yet allowed her to walk, but she often fell down. She possessed the use of all her senses, eat moderately, and all the functions of nutrition were well performed.

In the month of January, 1831, when seen by M. Combette, her condition was as follows:—Her features indicated a deteriorated constitution, and possessed an air of stupidity; she lay constantly upon her back, with her head inclined to the left side, and she could scarcely move her limbs, which, however, exhibited no diminution of sensibility; she had the free use of her hands; her condition always manifested depression and dulness, and she seemed alike indifferent to both pleasure and pain. When questioned, she replied simply *yes* or *no*, always, however, correctly.

For a long time she had been subject to glandular engorgements about the neck, and especially near the parotids, and for a fortnight had a carbuncle, of no great size or violence, situated on the right buttock. On the three outermost toes on the same side there existed an ulceration accompanied by a livid redness, from which there was a very abundant discharge of extremely foetid pus.

Towards the middle of February, along with her other infirmities, Alexandrine Labrosse had stomatitis (as had many other children in the hospital), complicated with symptoms of enteritis. After this she grew daily more and more feeble, exhausted by an incessant diarrhoea.

She died on the 25th of March, 1831. Since her death, I have been positively informed, that she was addicted to the habit of masturbation. The sisters have also assured me that she was subject to epileptic convulsions, and that a few moments before death she had experienced a violent general convulsion.

Autopsy thirty hours after death.

External Habit.—Body lank and emaciated; skin discoloured; large slough over the sacrum; a small livid wound on the right buttock, occasioned by the incisions I had made. The three diseased toes had a blackish and gangrenous appearance; scrofulous engorgements upon the neck.

Head.—Under the integuments of the cranium near the parietal protuberance of the right side, an echymosis existed about the size of a dollar; the cranium was much thicker than usual; the meninges of the brain appeared healthy; the cerebrum appeared in a natural condition, except that it seemed to me comparatively very large. Dissected subsequently by M. Magendie, a small sanguineous effusion was found in the left posterior lobe, which did not appear to have existed long, and which was not more than two or three lines in diameter. The covering of the cerebellum being divided, the medulla oblongata cut at the occipital foramen, and the encephalic mass raised and inverted, the following appearances were observed:—

A large quantity of serum was discharged,

filling the occipital fossæ. In place of the cerebellum, I found a gelatinous membrane of a semicircular form, attached to the medulla oblongata by two membranous and gelatinous peduncles. The one of these on the right side had been torn. Near these peduncles I found two small white isolated masses about the size of a pea. On one of these was found one of the branches of the fourth pair of nerves. The tuberculi quadrigemini were entire. On the posterior and inferior side there was the appearance of an erosion, in the midst of which the orifice of the canal of Sylvius appeared. It extended a little upon the medulla oblongata, making a slight alteration in the restiform, and in the olivary bodies. The fourth ventricle did not exist. There was no trace of a pons varolii, but without any appearance of want of substance. The anterior pyramidalia terminated in a fork by the cerebral peduncles.

Of the cerebral nerves, I could only find the origin of the first, second, third, and fourth pairs, which appeared in a healthy state, except the latter, which was, as I have said, detached with the small white mass, of which I have spoken. Not having raised the brain myself, it was impossible for me to find the origin of the other pairs. They all, however, existed, and could be easily perceived through the openings of the dura mater. They have, moreover, been subsequently dissected by M. Magendie, and exhibited no peculiarity.

The cerebral substance was of the ordinary consistence, but the medulla oblongata appeared a little softened, especially about the erosion I have described, where there existed a kind of maceration. The occipital hollows were regularly formed, but appeared to me rather smaller than natural. The vertebral arteries existed. I cannot say how these were distributed, because they did not at first fix my attention.

Spine.—A considerable quantity of serum ran from the spinal canal. The spinal marrow offered nothing remarkable.

Chest.—Both lobes of the lungs crepitated, but their whole surface was covered with miliary tubercles, which were also found in the parenchyma. The cavity of each pleura contained two or three ounces of serosity. The pericardium and heart offered nothing in particular.

Abdomen.—The intestinal circumvolutions were of a deep red colour. The mucous membrane of the stomach exhibited a number of red dots on a slate coloured ground, and near the anterior part and great arch, there were five or six brown patches. In the middle of each of these, a small ulceration with elevated and perpendicular borders appeared. This membrane was otherwise of its ordinary consistence and thickness.

The mucous coat of the duodenum presented no ulceration. It was slightly red, and its follicles prominent. After this, throughout the whole tract of the small intestine, it was of

a livid red colour, presenting numerous ulcerations, especially about the ileo-cæcal valve. The large intestines presented nothing in particular.

The mesenteric ganglions were larger than ordinary. The liver was of an extraordinary size, and of a pale colour.

The Organs of Generation.—The finger could readily be introduced into the vagina. The hymen did not exist. The labia were of a lively red colour, and bore the appearance of having been frequently irritated. The ovaries and uterus existed, but they appeared smaller than usual with girls of the same age.

The kidneys, spleen, &c., were in a natural state.

Conclusions.—This singular case is calculated to excite the particular attention of physicians of the physiological school, and presents no less interest for pathologists. I regret exceedingly my inability to say anything relative to the moral condition of this child previous to its entrance into the hospital, and am still in the expectation of receiving further information. Should any particulars be offered, I shall immediately communicate them.—*Bull. de la Soc. Anai.*—*Rev. Médicale.*

ASILE L'ENFANCE.

Catarrhal and Muco-purulent Epidemic Ophthalmia.

BY DR. CHARDON, JUNIOR.

Catarrhal ophthalmia, occasionally assuming a muco-purulent form, has been recently epidemic at the asylum of infancy, in the faubourg St. Germain. Out of one hundred and fifty children of either sex, from three to seven years old, now within the walls of this establishment, which is in a very healthy situation, scarcely any have escaped this complaint, and many have had it a second time.

It was more especially characterised by an abundant secretion of a puriform discharge, more or less thick. The injection of the eyes presented the appearances attributed to the catarrhal, and not unfrequently also those of the scrofulous, injection. In twenty cases, pustules formed about half a line distant from the cornea.

The redness of the conjunctiva was not in proportion with the blennorrhagic discharge, and many of the children had a very free secretion, with scarcely any injection of the conjunctiva.

In addition, the photophobia and the pains were very slight, and vision was good, except in those cases where the cornea was constantly covered with the secretion of pus.

The duration of the disease, which existed nearly three months in the house, varied in different individuals. In one-half the patients it continued in the acute form only about eight or ten days; in others from twelve to fifteen; finally, in the greater number, after remaining acute for the period just indicated, there would

be a slight discharge for a week or two afterwards.

The ophthalmia was severe in some of the children, but in almost all the instances it was confined to the conjunctiva of the palpebra and eye.

A grain of the corrosive sublimate, in two ounces of distilled water, was used as a collyrium. From four to eight grains of calomel, with as much jalap, was given internally; in some cases leeches were applied to the thighs. With such measures the progress of this epidemic was arrested, and in no case did any injurious results occur.

British Hospital Report.

WESTMINSTER HOSPITAL.

Diseases of the Testicle.

CASE I.—*Orchitis.*—James Pigot, ætat. 24, tall and thin, of an atrabilious temperament, was admitted into Percy Ward, Sept. 23rd, 1833, under Sir A. Carlisle. While ascending a ladder his foot slipped, and he fell, striking the right testicle against it. The organ became swelled and painful; twelve leeches were ordered to be applied, to be followed by cold lotion.

24th. Complains of pain in the loins, and increase of pain in the testicle, extending up the cord, with considerable swelling; cannot bear manipulation; bowels open; makes water freely.—Cont. lotio, et habeat haust. cathart.

25th. Slept a little during the night; complains of great pain in the abdomen, pressure on which he says is unbearable; the pain in the loins continues, that in the testicle is lessened, but the swelling is greater; bowels open three or four times during the day; pulse rather full and quick, but not frequent; 80; tongue furred; great thirst.—Applic. hirud. xxiv. testi.

R. Antim. tartariz. gr. ij.; magnes. sulph. ʒj.; mist. camph. ʒvj.; liq. ammon. acet. f. ʒij.—Solve, fiat mistura cujus capiat cochlearia larga duo 2dis horis. Cont. lotio.

26th. The leeches were not applied until the evening; they bled freely, and he is now much relieved; the pain is very much diminished; bowels open.

27th. Has suffered an accession of pain in the loins and testicle.—Applic. hirud. xij. Cont. mist.

28th. Pain much lessened by the leeches, and the swelling appears to be diminished.

29th. The pain has recurred, and the other testicle and spermatic cord are similarly affected; the pain in the loins continues, and she is very feverish.—Applic. hirud. xij. test. sinistro. Rep. mist.

30th. Pain again relieved, and he is improving.

Oct. 2nd. The pain continues to diminish,

and the swelling of both testicles has decreased very much—they are scarcely more than half the size they were.

8th. The pain is quite gone, and the tumefaction continues to lessen; the epididymes remain hard and enlarged.

11th. The swelling has recurred in the right testicle and cord, both of which are painful to the touch; is ordered leeches to the part.

12th. The leeches have not been applied, there not being any fresh ones in the ward. The pain has continued to increase in severity, and has extended to the abdomen and loins as in the previous attack; excessive tenderness of the parts exists.

13th. Although the leeches have not been applied this time, he has experienced more rapid relief than on the previous occasions. He is now nearly free from pain, and apparently doing well.

19th. Is quite free from pain, and the testes are of their natural size.

23rd. Dismissed.

CASE II.—*Orchitis*.—Frederick Gladwith, ætat. 17, a servant, of the middle size, and sanguineous temperament, was admitted into John's Ward, Sept. 25th, 1833, under Mr. White. On the 21st, in the evening, he first perceived a swelling of the left testicle, attended with great pain, so as to prevent his sleeping. He got alarmed at this, and went to a chemist, who directed him to apply eight leeches, to be followed by cold lotion; he also gave him some purgative medicine. He followed this advice, but found no benefit; on the contrary, the pain and tumefaction continued to increase.

On examination, the testicle was found very much swelled, and exceedingly painful, so that he cannot bear to have even the integuments touched; the scrotum of that side is distended and inflamed; the cord is tender; complains of severe pain across the loins; slight scalding of water; bowels very open; pulse more frequent and fuller than natural; no headach.

He says that he does not know any cause for this attack; has never had the clap, nor been in the way of getting it; he has not received any blow or kick, or other injury to the part; the only cause to which he can ascribe it is carrying heavy weights up and down stairs. Mr. W. B. Lynn saw him, and ordered him to keep in bed, and have twenty-four leeches applied.

26th. He continues in much the same state; the leeches have not been applied, and nothing has been done for him; bowels open. Let the leeches be applied at once.

R. Antim. tart. gr. ij.; magn. sulph. f. ℥jss.; liq. ammon. acet. ℥ij.; mist. camph. ℥vj.; fiat mist. capiat coch. larg. ij., secundis horis.—Cold lotions to be applied after the leeches have dropped off, low diet, and to wear a bag truss.

27th. The leeches bled well, and the pain is much relieved, but the tumefaction continues; the medicine made him vomit once, and has kept up a state of constant nausea since; bowels well open; skin cool; pulse regular, not so full as it was.

28th. Mr. White directs the medicine to be continued, with the omission of the ant. tart.

29th. Is free from pain, and going on well.

From this time may be dated the cure of the inflammation; the swelling of the testicle diminished very gradually, and it was not entirely reduced when he left the hospital on the 5th of November.

CASE III.—*Laceration of the Scrotum, followed by Orchitis*.—Elijah Edwards, ætat. 15, a labourer, was admitted into Northumberland Ward, January 6th, 1835, under Mr. Guthrie. Is a pale thin lad, of the strumous diathesis. He states that while ascending a ladder, as he was placing his foot on the twentieth step from the ground, he slipped and fell, striking against a post. A lacerated wound of the scrotum was the result, the testicles being exposed, and hanging out of the wound. He was immediately carried to the hospital, where the testes were returned, the lips of the wound brought into contact, and retained so by ligatures. He was placed on low diet, and ordered salines with tartarised antimony, and cold lotion to the part.

Inflammation affecting the scrotum set in to a considerable extent, for which leeches were applied with some benefit, but it soon extended to the testicle, which became much tumefied and very tender, so that he could not bear to be touched. Thirty-six leeches were applied, and when they dropped off, a poultice was used to encourage the bleeding. The inflammation, although lessened, still continued, and required the further application of leeches; the medicine was given so as to produce and keep up nausea. On the 11th he was cupped on the perinæum with decided relief; by the 18th he was entirely free from pain, and early in February he was dismissed cured.

CASE IV.—*Chronic Enlargement of the Testicle*.—Jacob Button, ætat. 42, a native of Somersetshire, now resident in the Vauxhall-road, was admitted into Mark's Ward, Aug. 8th, 1833, under Mr. Guthrie. Is an excavator, a man rather above the middle size, and stout, sanguineous temperament, florid complexion, not married; has had the venereal disease, he thinks, about twenty times, gonorrhœa only once, and that so recently as a year and a half ago; the left testicle began to swell shortly afterwards, attended with what he considered to be a rheumatic affection of the joints, and symptoms of fever. He was an in-patient in this hospital for that complaint. The swelling of the testicle continued for about four or five months, and as that got better the right became enlarged, attended

with considerable pain and fever. He placed himself under medical treatment, and leeches followed by fomentations, &c., were employed. By these means the swelling was nearly removed, but some induration still existed; in about six weeks after it was again nearly the same size as before: it was much reduced by treatment, but re-enlarged, and continues so; he has never had secondary symptoms of syphilis.

The right testicle is enlarged, elongated, and harder than natural, but smooth, without any irregularities, either in shape or degree of firmness; the cord on the right side is also enlarged, but not hardened, nor does it appear to be otherwise diseased; he suffers very great pain occasionally in that testicle; the left is rather enlarged, but not painful.—Middle diet.

18th. His general health is out of order; he is taking, by Mr. Guthrie's orders, a pill composed of hyd. submur. gr. iss., extr. conii gr. iij., night and morning; has not yet any coppery taste or symptoms of ptyalism; the pain is lessened.

27th. Continues much the same; no mercurial action; to continue the pills, and rub in the ung. hydrarg. fort.

29th. Slight mercurial taste in the mouth, and other symptoms of commencing ptyalism are showing themselves; thinks himself improved, and the pain is diminished.

Sept. 2nd. He is now freely salivated, and the mouth is very sore; the testicle is much smaller.

5th. The testicle is now about half the size it was when he came in.

7th. Mr. Guthrie remarked to-day when he saw him, that in such a case formerly the testis would have been removed on the supposition of its being scirrhus.

11th. Continues to improve; the testicle is nearly of the same size as the other; is to leave off mercury.

24th. Dismissed, with directions to take care of himself.

CASE V.—Fungus of the Testicle.—George Harris, ætat. 24, admitted August 13th, 1833, into Mark's Ward, under Mr. Lynn; is a native of Bristol, by employment a clerk; dark complexion, nervo-sanguineous temperament; says he has always enjoyed very good health; has had clap three times, but says he never had syphilis. He has never had sore throat, eruption, inflammation of the eye, or buboes; he, however, had chancres about nine months ago, which he treated himself with blue-stone, and did not take mercury. Had an attack of gonorrhœa about the same time, which continued on him a month; has never had any blow or other injury to the testes. The tale he tells as to the cause of his complaint is as follows:—About seven months ago, he was sitting on a low wall in his mother's garden, his testes hanging close to the wall, which felt very cold, and which he con-

siders produced the present complaint. Shortly afterwards the left one began to swell, without pain. He had not clap, or other disease, at the time: it was attended with pain in the back, but none in the urethra, nor was there any sediment in the urine. A fortnight after, he became an out-patient at the Bristol Infirmary, having had nothing done for it previously. He was there treated by nauseants, and poultices to the part: by these means, the pain in the back was removed, but the swelling continued. He attended there about a month, and then gave up his letter. The testis was at that time twice its natural size: during all this time he never wore a suspensory. A fortnight, or rather more, afterwards, it ulcerated, and, shortly after, a painless, insensible fungus protruded, not bleeding, or giving pain, even when cut or burnt: he then re-attended at the Infirmary, when he was directed to poultice it, and take opening medicine. In another fortnight, the right testicle began to swell, and speedily ulcerated, still unattended with pain. The left continued in the same state, but the fungus separated from the right organ, and the opening closed, under the application of strapping. This time he attended at the infirmary nine weeks, and, when he ceased going, the left was as bad as ever. Three weeks after he had given up his letter, the right ulcerated again, and a fresh protrusion of fungus took place. He was now induced to come up to town: he performed the journey on foot, and shortly after entered this hospital.

He says his health is good; sleeps well; is not in any pain: the only inconvenience he suffers is from the unsightly and unpleasant appearance of his testicles, the disagreeableness of the discharge, and their additional weight. Appetite good; bowels regular; tongue rather furred; pulse regular, but rather full, eighty beats in the minute. He has not had stricture, and has not any other complaint of the urinary organs.—The venereal desire continues, and he considers that he has quite as much power of gratifying it as before the appearance of this complaint, but, perhaps, less frequently than formerly. The left testis is much larger than natural, and considerably indurated; the fungous growth is irregular in shape, whitish, and indolent, with a secretion of unhealthy pus; the cords feel normal.

He was admitted with the view of performing castration; but, after he had been a little while in the hospital, he made up his mind to keep them, and accordingly left the hospital, which he, in all probability, only entered as a place of refuge to relieve himself from his fatigue.

The result of the next case will show that it is very probable that had an operation been performed, the testes would have been found sound, the fungus springing from the tunica albuginea; the symptoms resembled each other perfectly in both cases.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Saturday, Feb. 28, and Thursday, March 5, 1835:—Alfred Lochéc, —; Edward Joseph Staples, Bristol; John Gorham, Tonbridge; George Tomkyns George, Bath; Geo. Connolly Cone Lunn, Guernsey; Thos. Chandler, —; John Lower Clark, Devouport; Parker Margetson, Kirkby Stephen; John Jackson, Wharfedale, Notts.

MISCELLANY OF FACTS.

Bengeforth, St. Peter, Evesham.—One of the guardians of this parish, elected in 1815, was continued in office for fifteen years. This gentleman united in himself the several offices of *magistrate! guardian of the poor!! surveyor of roads!!! assessor of taxes!!!!* and was, besides, a *medical man!!!!* The utmost number of inmates in the workhouse has been eighteen, the least twelve. They have been fed, clothed, washed for, *physicked*, and kept warm for 614 weeks at 2s. 5 $\frac{1}{2}$ d. a-head each week. It is but justice to add, that this gentleman has reduced the parochial expenditure nearly one-half.

We have just been informed that while a certain celebrated performer of operations upon rabbits in the borough was the other day in the act of executing one of his first-rate cuts, the amazed and horror-struck animal bolted. The gentleman in question gave chase, and pursued the *doomed* at the top of his speed. How long the chase would have continued we cannot say, but thus far our informant states, that the Professor, having made a *demi-volte* on one side to catch his four-footed prey, something or other caught his great toe, and down he fell. The rabbit has not since been heard of.

Proposal to establish a Charitable Institution for affording Medical Assistance to indigent Europeans and East Indians at Calcutta.—Mr. Hutchinson, in a long letter to the editors of the *Indian Journal of Medical Sciences*, recommends the institution of a kind of dispensary for the European poor in Calcutta, because the general hospital is at such a distance from the city as to render it almost useless to send there in cases of emergency. If the government could be induced to allow the prescriptions to be prepared at their dispensary, as Mr. H. seems to expect, it is calculated that the whole expense could not be more than 2500 rupees annually, including the pay of the medical officer, at 100 rupees a month, little enough for the duties Mr. H. proposes, viz.—two hours' attendance every morning and one hour each afternoon.

Dr. Auzoux's Anatomical Figure.—We have great pleasure in stating that, in the course of last year, a copy of this splendid machine was received in Calcutta from the Court of Directors of the Company, and placed in the Native Medical Institution. It cannot fail to be of great service in India, where, from the heat of the climate, it must be almost impossible to dissect.

The annual expense of the medical establishment of the King of the French is 176,000 francs, or very nearly [rather more than] £7000 sterling. Of this sum the first physician has 20,000 francs, the second 12,000, and the remainder of the amount is divided among the physicians, surgeons, and apothecaries of the household.

It has been determined, in the disposal of insane patients (soldiers), admitted into the Military Lunatic Asylum at Chatham, whose services do not give them a claim to be wholly maintained at the public expense, and who, after treatment for a reasonable period, can obtain no prospect of benefit from a further continuance in the hospital, that part of the expense at least shall be borne by their parishes. The admission of female

patients, the wives and widows of soldiers, into the asylum is very nearly stopped altogether, on the ground that their admission appears to be so objectionable in principle as to be justifiable only under the most urgent and extraordinary circumstances.

WEEKLY BILL OF MORTALITY.

London, Tuesday, March 10th, 1835.

Abscess	4	Inflammation	24
Age and Debility	37	Inflammation of the	
Apoplexy	5	Brain	2
Asthma	20	Inflammation of the	
Cancer	4	Lungs and Pleura	7
Childbirth	2	Insanity	3
Consumption	61	Liver, Diseased	3
Convulsions	21	Locked Jaw	1
Croup	2	Mcases	11
Dentition, or Teeth-		Mortification	3
ing	7	Paralysis	4
Dropsy	11	Rheumatism	1
Dropsy on the Brain	6	Small Pox	11
Dropsy on the Chest	2	Sore Throat & Quinsey	2
Fever	4	Spasms	1
Fever, Scarlet	3	Stone and Gravel	1
Fever, Typhus	1	Thrush	1
Gout	1	Unknown Causes	8
Hooping-Cough	29		
Inflammation of the			
Bowels & Stomach	4	Stillborn	11

Buried, Males 182 Females 139 Total 321

Decrease in Burials reported this week, 71.

CORRESPONDENTS.

Ignis Fatuus.—The Royal Society have the gift of 60l. every other year for any discovery concerning heat and light.

A Subscriber.—The numbers he inquires for may be obtained by application at our office.

Thaumatrope.—The peculiar property of the eye which he describes is more suitable to some work on natural philosophy than to our pages.

Philo-Pharmakos.—The scheme of mutual concession between general practitioners and chemists, we fear, is not practicable: the change would be too sudden.

"Cholera."—The frigate which conveyed the cholera to the Isle of France was the *Topaz*.

The Surgeon of a South Seaman.—His comments upon the formation of the head of a New Zealander are under consideration. The sample he has sent us appears to be extremely well preserved, and we thank him for the specimen.

Tabacus.—We know that some instances have occurred of foreign substances, of which snuff formed the nucleus, being found in the frontal sinuses. We believe it was the late Mr. Joshua Brookes that possessed several preparations indicating the possibility of such an occurrence.

Our correspondent from Quebec will see that we have noticed his communication.

A Lover of Pure Water.—Our Hampstead correspondent shall be attended to in our next, or, at all events, as soon as the press of matter will allow us to consider his views.

H. R. S.—We have long been aware that titillations per anum have procured dejections in the same mode as by the use of clysters.

Nauticus.—There is no regulation compelling ships containing a less number than fifty passengers, crew included, to take a surgeon on board: the law wants amendment in this respect.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE III.

Sleeplessness—Sleeplessness from Anxiety, Grief, &c.—Case of Jaundice accompanied by Sleeplessness—Treatment—Remarks on Purgative Mixtures—On the proper time for administering Opiates—Sleeplessness in Delirium Tremens—Chronic variety of Delirium Tremens—Treatment—Sleeplessness in Fever—Case—Failure of different modes of Treatment—Use of Opiate Injections—Delirium Traumaticum—Constitutional Irritation from Blisters—Treatment—Sleeplessness in Hypochondriacs and Hysterical Females—On the use and abuse of Cold Applications to the Head.

GENTLEMEN,—Two cases which have been recently under treatment in this hospital, demand your particular attention,—the man who has been labouring under a severe attack of jaundice, and the boy who is recovering from fever. A remarkable symptom in both of these patients, and which must have repeatedly attracted your notice, was a total privation of sleep. In the former case the sleeplessness continued for a week, in the latter for nine or ten nights.

Sleeplessness is a very curious result of disease. It accompanies certain morbid conditions of the system brought on by actual disease, or by grief, care, and various other forms of mental disturbance, continues to harass the unhappy sufferer night after night, and frequently resists the most powerful and decided narcotics. I do not intend to enter into any inquiry respecting the different states of the constitution in which it occurs; my purpose is merely to offer a few practical remarks on the more obvious and striking examples, with the view of illustrating the cases to which I have directed your attention.

There is a form of sleeplessness which is frequently the precursor of insanity, and which

has been well described by my friend Dr. Adair Crawford. The watchfulness in such cases is accompanied by the well known symptoms of incipient mental derangement, and its treatment is therefore inseparably connected with that usually resorted to in cases of threatened insanity, and embraces the employment of means moral as well as physical. Of these it is not my intention to speak; I may observe, however, that Dr. Crawford has found opium, gradually increased to very large and frequently repeated doses so as to produce sleep, the best remedy.

In the case of jaundice, the patient passed several nights without any sleep. He was just beginning to recover from the jaundice when this new symptom appeared, and I directed your attention particularly to the circumstance, because every manifestation of nervous derangement connected with jaundice should be carefully watched. It frequently happens that jaundiced patients sleep too much, and in some cases the disease is accompanied by convulsions, succeeded by coma, most alarming symptoms, and almost invariably the harbinger of a fatal termination. Dr. Marsh was the first who directed our attention to the great fatality of those cases of jaundice in which convulsions occur; I have seen but one instance of recovery. It was in the case of a gentleman labouring under icterus, very considerable hepatitis, with enlargement of the liver and anasarca, with ascites. He was treated by Dr. Osborne and myself, and had at least a dozen long and violent convulsive paroxysms, ending in coma, succeeded by temporary forgetfulness and fatuity. Repeated leeching of the right hypochondrium, active purgation, and mercurialisation of the system removed all the symptoms of disease, and he slowly but perfectly recovered. A very able and original writer, Dr. Griffin of Limerick, has detailed the particulars of some interesting cases of this nature in the *Dublin Medical Journal*. You perceive, therefore, that in jaundice every thing denoting an unusual state of the nervous system, whether it be too much sleep or too little, demands your attention.

In this man's case the jaundice was the re-

sult of an attack of hepatitis. We treated it with leeches, blisters, and the use of mercury, and in the course of a few days the stools became copiously tinged with bile, and symptoms of improving health appeared. At this stage, the dejections being bilious, but the jaundice still remaining, he began to exhibit symptoms of restlessness and nervous irritability, and finally became perfectly sleepless. Here, gentlemen, we had to deal with a new symptom, extremely harassing to the patient, and likely to react unfavourably on the original disease. As a preliminary step I determined to evacuate the bowels, and for this purpose I prescribed a purgative draught, consisting of five ounces of infusion of senna, half an ounce of sulphate of magnesia, a drachm of tincture of senna, and a scruple of electuary of scammony. My object was to purge briskly, and then give a full narcotic. In all cases of jaundice depending on hepatic derangement, after you have succeeded in producing bilious evacuations, you should never omit prescribing an active aperient every second or third day for the space of ten days or a fortnight, with the view of carrying off the remains of the disease so as to prevent the occurrence of a relapse. Hence you will find such cases very much improved by the use of Cheltenham water, taken every day for three or four weeks *after the reappearance of a bilious tinge in the alvine discharges*. The stimulus of the purgative causes an increased flow of bile into the intestines, which removes the hepatic congestion, and carries off what is popularly termed the dregs of the disease, and promotes a rapid and complete recovery. It is a simple but successful practice, and I would advise you never to omit its employment in cases of this description.

With respect to purgative mixtures, I may observe that you should prescribe a larger quantity of the infusion of senna than is generally ordered, if you wish to secure its certain and decided operation on the intestines. Hospital nurses, who reason from facts and experience, know this, and when directed to give a senna draught they always give a small tea-spoonful. They administer from four to six ounces at a time, and I have observed that in this way the action of the medicine is more certain, and the benefit derived from it more extensive. I am convinced that the usual mode of giving this valuable purgative in private practice is bad; the quantity given is too small, and consequently it is necessary to repeat the dose several times, a mode of proceeding apt to occasion much nausea and griping, I would therefore recommend a quantity varying from three to six ounces, to be administered in all cases where the patient's condition will admit of free purging. A most accurate observer of the effects of medicines, Mr. Kirby, is in the habit of ordering purgative mixtures in chronic cases to be taken at bed time, and not, as is usually done, in the morning. He asserts that their action is

milder and less irritating to the bowels when the patient lies in bed and is asleep until the period of their operation, than if he were up and about.

After the purgative had produced four copious discharges, I prescribed eight minims of black drop, to be taken at a late hour in the evening. Whenever I give opiates to procure sleep, I always observe the rule laid down by Dr. McEride (a celebrated physician of this city), to select the period at which nature usually brings on sleep, and which varies according to circumstances and the habits of the patient. Whenever you have to deal with watchfulness in patients labouring under morbid states of the constitution, as, for instance, hectic, inquire when the tendency to sleep usually occurs, and administer your narcotic about an hour or two before its occurrence. It is between three and five o'clock in the morning that the inclination to sleep is strongest; it is about this time that sentinels are most apt to slumber at their post, and consequently attacks upon camps or cities, made with the intention of effecting a surprise, are usually undertaken about this period of the morning. How well marked is the periodic tendency to sleep at this hour in all patients labouring under hectic fever produced by whatever cause. How often do we hear the poor sufferer complain of restlessly tossing about in his bed until three or four o'clock in the morning, when at last sleep, welcome although uneasy, for a few hours separates the patient from his pains. If given at an early hour in the evening, the effect of the opiate is not coincident with this periodic attempt of the constitution, and it fails in producing sleep, but if exhibited at a late hour, it begins to produce its soporific effect at the very time when nature inclines the harassed sufferer to repose, and the result of these combined influences is a deep, tranquil, and refreshing sleep. By observing this simple rule, I have often succeeded in producing sleep in cases where various narcotics had not only failed, but even added considerably to the irritation and discomfort of the patient.

In cases of sleeplessness, where you have administered an opiate with effect, be careful to follow it up for some time, and do not rest satisfied with having given a momentary check to the current of morbid action. To arrest it completely, you must persevere in the same plan of treatment for a few days, until the tendency to sleep at a fixed hour becomes decidedly established. You must give an opiate the next night and the night after, and so on for five or six nights in succession, and where the watchfulness has been of an obstinate and persistent character, narcotics must be employed even for a longer period and in undiminished doses. I do not allude here to the sleeplessness which accompanies confirmed hectic and other incurable diseases; such cases require a particular mode

of treatment, and generally call for all the varied resources of medicine. But in those instances of watchfulness, which are frequently observed towards the termination of acute diseases, it is always necessary to repeat the opiate for some time after you have succeeded in giving a check to this symptom. You need not be afraid of giving successive opiates lest the patient should become accustomed to them, and a bad habit be generated, for the rapid convalescence and renewed health, which are wonderfully promoted by securing a sound and refreshing sleep, will soon enable him to dispense with the use of opiates.

Another disease in which sleeplessness is a prominent symptom, is delirium tremens. We have had an example recently in our wards, and you have seen the means employed to overcome it. The patient came into hospital with symptoms of extreme nervous excitement and watchfulness, which had continued for some time, and were brought on, as is most commonly the case, by repeated fits of intoxication, succeeded by a pause of perfect sobriety—in Irishmen the result of necessity or accident. In this man you must have remarked the signal benefit which attended the use of a combination of tartar emetic and opium, and how rapidly the watchfulness disappeared. I shall not enter into the details at present, as I purpose to return to this subject on a future occasion.

There is, however, one form of nervous irritability, frequently observed in persons who are in the habit of drinking freely, but without running into excess, and presenting as it were a shadow of delirium tremens, on which I shall make a few remarks. This curious state of the nervous system is generally found to exist in men about the middle period of life, and who consume a larger quantity of spirituous liquors than they are able to bear. Such persons, without suffering in appearance, or losing flesh, get into a chronic state of disturbed health, manifested by nausea, and even dry retching, in the morning, loss of appetite, and impaired digestion; but, in particular, by a deranged and irritable state of the nervous system, and by watchfulness. This forms one of the most distressing symptoms, and the patient generally complains that he cannot get any sound and refreshing sleep, that he lays awake for hours together, and that when he slumbers his rest is disturbed by disagreeable dreams, or broken by slight noises. How are you to treat this affection? I can give you a valuable remedy for this deranged state of constitution—one which I have often tried, and which, from experience, I can strongly recommend. It is a mixture composed of tincture of Columbo, quassia, gentian, and bark—say, an ounce of each; and to this is added a grain, or even two, of morphia. A compound tincture, somewhat analogous to this, is much in use among military gentlemen, and others, who have resided for a considerable time in the Indies, where, from the heat of the climate,

and the prevalence of intemperate habits, the stomach becomes relaxed and the nervous system irritable, so as to represent, in a minor degree, the symptoms which characterise delirium tremens. You perceive I combine several tonics to form this mixture, because they are well known to produce a more beneficial effect when combined than when administered singly; and I add to these a narcotic, which has the property of allaying nervous excitement without deranging the intestinal canal. The dose of this mixture is a teaspoonful three or four times a-day, and the best time for taking it is about an hour before meals. It gradually removes the nausea and debility of stomach, lessens nervous irritability and watchfulness, and, with a proper and well-regulated diet, and attention to the state of the bowels, I have seen it produce excellent effects. In such persons much benefit is derived from the use of the tepid shower-bath.

Fever is another disease in which sleeplessness is a symptom, frequently of an unmanageable character, and pregnant with danger to the patient. You witnessed this in the case of the boy who lies in the small Fever Ward, next to the man who is at present labouring under general arthritis. This boy had fever of a mild description, and unattended with any bad symptoms. His case scarcely required any attention, and he had almost arrived at a state of convalescence without the aid of medicine, when he began to lose his rest, and absolutely became sleepless for several nights. I beg your attention to this case, for many reasons. In the first place you have seen that we tried many remedies without success, and afterwards fortunately hit on one which answered our purpose completely. Let us examine the nature of the medicines prescribed, and our reasons for giving them.

In the first place, we gave, as in the case of jaundice, an aperient, followed by a full dose of black drop. It failed in producing any sleep; we repeated it a second and a third time, but without the slightest benefit. I then remarked to the class, that as I had noticed the good effects resulting from a combination of tartar emetic and opium in the case of delirium tremens, where opium alone failed in procuring sleep, it would be proper to give this remedy a trial. I observed at the same time, that I was convinced that the preparations of antimony have a distinct narcotic effect, and that I had seen patients in fever whose watchfulness had been removed by antimony given in the form of tartar emetic or James's powder. I said it was my firm impression that tartar emetic, along with its other effects, exerts a decided narcotic influence on the system, and that it is this which makes it so valuable a remedy in treating the sleeplessness of fever and delirium tremens. Hence I have been in the habit of giving tartar emetic combined with opium in fever, and, I must add, with very great success. Our predecessors were much in the habit of using antimonial

mixtures in the treatment of fever, and they did this because they knew, by experience, that these remedies worked well. It is at present too much the fashion to decry their practice, and in this instance I think with very little justice.

In this boy's case, however, the combination of tartar emetic and opium did not succeed in producing sleep. Having thus failed in our first and second attempts, we had recourse to the liquor muriatis morphiæ, a preparation first brought into use by Dr. Christison, and which, in the form usually employed, is equal in strength to laudanum. It is an exceedingly valuable preparation for many reasons, and one which has the strongest claims to your notice. Being of the same strength as laudanum, it saves the trouble of learning and remembering new doses, and, in addition to this, it possesses the more important advantages of inducing sleep with more certainty, and not acting as an astringent on the bowels, or affecting the head so frequently as laudanum. You observe that I say so frequently; I do so because cases now and then occur in which even moderate doses of the liquor of the muriate of morphia produce quite as much head-ach as laudanum. I prescribed the former in doses of fifteen drops every six hours, so as to give sixty drops in the day, and continued this practice for two days, but without the slightest effect. Here you see three modes of inducing sleep completely failed. The boy remained for a day without taking any medicine, and then we made another attempt, which was more successful. We first prescribed a purgative enema, and, after this had operated, he was ordered an opiate injection, consisting of four ounces of mucilage of starch, and half a drachm of laudanum. He fell asleep shortly after using the opiate injection, and did not awake until the next morning. The following night the opiate was repeated in the same form and with equal success; convalescence went on rapidly, and the boy's health is now quite re-established.

Here, then, is a singular fact, attested by this case, that opiates in the form of injection will succeed in producing sleep, where they have completely failed when administered even in large and repeated doses by the mouth. Baron Dupuytren was the first who made this important observation, and proved that narcotics applied to the mucous surface of the rectum exercise a powerful influence on the nervous system, always equal, and very often superior, to the effect produced by taking them into the stomach. He maintains, that in delirium traumaticum and delirium tremens a certain quantity of opium, when prescribed in the form of enema, will act with more decided effect in allaying nervous excitement, than the same or even a larger quantity when taken by the mouth. I have no hesitation in giving full credit to this assertion, as the results of my experience tend strongly to confirm its truth. I have, not long

since, published, in the *Dublin Med. Journal*, the case of a patient in Sir P. Dun's Hospital, who was reduced to the last stage of debility and emaciation from the combined effects of mercury and syphilis. The torture which this man endured from nocturnal pains and a total deprivation of sleep, was such that he swallowed enormous doses of opium; in fact, he had, previously to his admission into Sir P. Dun's Hospital, exhausted all his means in purchasing opium. While in hospital he used to take 150 drops of black drop in the course of a day, and yet, notwithstanding these excessive doses, he could only get a few minutes of unrefreshing slumber. After some time I changed the plan of treatment, and had the black drop administered in the form of enema. It succeeded in producing a decided soporific effect, and in a short time he was able to enjoy a sufficient quantity of repose, from taking only one-tenth of the quantity used by the mouth. I have also, in the same paper, adverted to the case of a medical gentleman who laboured under an affection of his joints, which was accompanied by spasms of the limbs and most excruciating pains. His agony was so intense that he used to swallow grain after grain of opium, until he had taken to the amount of 30 or 40 grains, with the view of procuring some alleviation of his sufferings. He was prevailed on to give up altogether the use of opium by the mouth, and employ it in the form of enema, which he did with the most striking advantage, the quantity which succeeded in giving relief in this way being scarcely the twentieth part of what he ordinarily used.

It is unnecessary for me to enter here into any discussion with respect to the nature and treatment of delirium traumaticum, and the sleeplessness which always accompanies it, as you will find this subject very ably treated in M. Dupuytren's works, and in a very instructive and elegant lecture delivered by Mr. Crampton (the Surgeon General) in this hospital, and published in the last volume of the *London Medical and Surgical Journal*. There is, however, one kind of sleeplessness arising from irritation of the skin produced by blisters, which frequently assumes a very serious character, and on which it may be necessary to offer a few observations, as the subject has not been noticed sufficiently by practical writers. Trifling as the irritation resulting from a blister may seem, yet, under certain circumstances, it is a symptom of highly dangerous aspect, and becomes a source of just alarm. I have witnessed the loss of some lives from this cause, and many patients have, to my knowledge, been rescued from impending danger, by an early and proper share of attention being directed to its phenomena and treatment.

The bad effects on the nervous system occasionally produced by the application of blisters, are somewhat analogous to those which result from wounds and other external injuries, and to be accounted for on the same principle.

Wounds and injuries sometimes make an impression on the nervous system, by no means proportioned to the importance of the injured organ to life, or to the extent of the mischief. An injury produced by a body which strikes the sentient extremities of the nerves with great force, will sometimes produce very remarkable effects on the system. Thus a musket ball striking a limb may, without wounding any great artery or nerve, or destroying any part of importance to life, produce a train of nervous symptoms of an extraordinary character. The person, without feeling much pain, and scarcely knowing that he has been wounded, without being terrified, or having his imagination excited by any apprehended dangers, turns pale, gets a tendency to faint, and sometimes actually dies from the impression made on the nervous system. In the same way, an external injury reacting on the nerves may bring on high mental excitement, delirium, and a total privation of sleep, as we exemplified in delirium traumaticum. I mention this with the view of establishing the proposition that impressions made on the sentient extremities of the nerves are sometimes reflected on the nervous centres, producing the most alarming effects. In this way we can understand how the irritation of blisters may produce sleeplessness, mental aberration, and a train of symptoms analogous to those which characterise delirium traumaticum.

The delirium and sleeplessness arising from the irritation of blisters is by no means an uncommon disease. I have seen many examples of it in private practice, and I am anxious that you should be acquainted with its nature and treatment. It is generally met with in the case of children, in whom the cutaneous surface is extremely tender and irritable. I could relate several instances in which I have been called on to visit children labouring under fever, where symptoms of high nervous excitement were present, and where I found the little patients delirious, screaming, and perfectly sleepless from this cause. I have found this alarming affection generally occurring at an advanced stage of fever, and exhibiting a train of symptoms which closely resemble hydrocephalus. I have observed that after the application of a blister to relieve some suspected cerebral, or abdominal, or thoracic affection, jactitation, restlessness, constant application of the hand to the head, and delirium have appeared, and that these symptoms had been mistaken for incipient cerebritis or hydrocephalus, and treated with leeches and purgatives. When the blister had been applied to the nape of the neck, the soreness and irritation of the skin on that part *cause the child to roll its head from side to side on the pillow, with that peculiar motion and scream supposed to prove to a demonstration the existence of hydrocephalus.* I have learned also, that the above measures, so far from giving relief, have only tended to produce an exacerbation of the disease, and that the medical

attendant has given up the case in despair. Now, gentlemen, if called to such a case what should be your practice? In four cases of this kind I gave my opinion frankly to the medical attendant, and told him he was pursuing a wrong course, that the disease was analogous to delirium traumaticum, and not to be treated by leeches or purgatives, and least of all by blisters. I observed to him that these symptoms had made their appearance shortly after the child had been blistered for suspected disease of the belly, or head, or chest; and that it was useless to attempt to remove the disease by leeches, or purgatives, or blisters. The remedy I always proposed was opium, and it was acknowledged in four or five cases, that this remedy had succeeded not merely in relieving the existing symptoms, but in saving the patient's life. In such cases, particularly in young children, the opium must be given in small but frequently repeated doses, so as to ensure its energetic, but safe action, and the greatest care must be taken to soothe the irritated portion of the skin, by ointments, poultices, &c., *while unwearied diligence must be bestowed upon the task of preventing the child from scratching the blistered surface.* To effect this the child's hands must be muffled in appropriate gloves, and must be secured in the sleeves of a shirt made for the purpose.

I beg your attention still further to this subject of sleeplessness and delirium. I wish to mention the case of a gentleman who was a pupil of mine. This gentleman studied hard, attended lectures regularly, and was constantly in the dissecting room. While thus occupied, he happened to wound one of his toes in paring a corn, and afterwards wore a tight shoe on the injured foot. A small imperfect abscess formed in the situation of the corn, which was opened by one of his fellow students; the incision gave very great pain, and was not followed by any discharge of matter. Next day he was feverish, and the lymphatics of the injured limb became extensively engaged, the inflammation ascending towards the glands of the groin, and having a tendency to form a chain of insulated patches in different parts of the leg and thigh along the course of the lymphatics. This you will generally find to be the case in inflammatory affections of the lymphatics; the inflammation is seldom continuous, but, in the majority of cases, is developed at certain insulated points, where small diffuse suppurations form very rapidly. After a few days, this young gentleman's fever increased to an alarming height, he became completely sleepless, and had incessant delirium. He was purged briskly, leeches extensively and repeatedly, his head shaved, and cold applications so constantly applied, that he appeared half drowned and collapsed. Notwithstanding this very active treatment, not the slightest relief was obtained; neither were the symptoms mitigated by incisions made in the inflamed patches for the purpose of evacuating matter; the sleeplessness continued,

and the delirium was as wild as ever. I saw him on the seventh or eighth day, when all antiphlogistic measures had failed, and his friends were quite in despair. On being asked my opinion, I stated that I looked upon the case as one of delirium, not proceeding from any determination to the head or inflammation of the brain, but depending on a cause analogous to those which produce delirium traumaticum, and that instead of antiphlogistics I would recommend a large dose of opium and some porter to be immediately given. Mr. Cusack who visited the patient after me, concurred in this view, and a full opiate was administered in repeated doses. It succeeded in producing sleep and tranquillising the nervous excitement. I may here observe that a few days afterwards this gentleman had a return of the symptoms of cerebral disturbance with sleeplessness, in consequence of omitting his opiate, and that the opiate and porter were again administered, and again succeeded in removing the delirium and watchfulness. By perseverance in the use of the same means, the disease was completely removed, and convalescence established.

The last kind of sleeplessness to which I shall direct your attention, is that which is frequently met with in persons of a nervous and irritable disposition, in hypochondriacs, and hysterical females. You will find such persons, although of active habits, and with tolerable appetites, complaining of a total privation of their natural rest, and it is astonishing to think how long they may continue subject to this harassing watchfulness. I have frequently observed this affection among females of nervous habit, who possessed strong feelings of attachment to the interest and welfare of their families, and who were remarkable for an exemplary and over anxious discharge of their domestic duties. It is also very often met with in the upper classes of life, where the susceptibility to nervous excitement is morbidly increased by fashionable habits. I shall not enter into the various moral causes which tend to produce this state of the nervous system, and will content myself for the present with giving you some hints for the treatment of this obscure affection. As yet I have not any distinct and accurate notions of the disease, and can only guess at the treatment, but this much I may state, that such cases are not to be cured by the means which I have already detailed. If they are to be cured by any means, I think it is by antispasmodics, and remedies which have a gently stimulant, and, if I may so express myself, alterative effect on the nervous system. I have cured two cases of this kind by musk and assafoetida, where every other remedy had failed. To one of these I was called by my friend, Dr. Neason Adams; the patient was a lady of delicate constitution and hysterical habit; she was emaciated, and suffered from a total loss of rest, but had no other disease. All kinds of narcotics had been tried unsuccessful-

fully, and opium in all its forms had failed in procuring sleep. I advised the use of musk in doses of a grain every second hour, and this means proved eminently successful. In another case I succeeded by administering the same remedy in combination with assafoetida. I have also remarked that assafoetida alone, given in doses of two or three grains three times a-day, has very considerable effect in calming nervous irritation of this description, and restoring the patient to the enjoyment of more prolonged and refreshing sleep. In all such cases the physician must be most careful to have the appearance of not thinking the loss of sleep as a matter of much consequence, and the family of the patient must be directed to speak as little about the matter in his presence as possible;—nay, so powerful is the operation of moral impressions, that in one case which I attended along with Mr. Halahan, I succeeded in procuring sleep by ordering a musk pill to be given every second hour night and day, and by desiring the patient to be awakened, should she be asleep, at the time the pill was to be taken. I laid great stress on the importance of so proceeding, and thereby produced so strong an effect on the patient's mind, and inspired so great a confidence in the efficacy of the medicine, that she went to bed, not so much afraid of lying awake as afraid of being asleep at the hours when she ought to take a pill. The idea which had hitherto fixedly occupied her mind was displaced by a new impression and relief was obtained the very first night.

In affections of the head occurring in acute diseases, and attended with raving and loss of rest, it is a very usual practice to direct the application of cold lotions to the shaved scalp.

Permit me, gentlemen, to make a few remarks upon this important subject. I wish I could make myself well understood on this point, for I have seldom met with any person who seemed to bear in mind the true principle upon which cold is applied as a means of repressing local heat. In cases of determination of blood to the head occurring in fever, the common practice is to have the head shaved and cold lotions applied. Enter the room of a patient who is using cold applications, and you will observe the process conducted with great apparent nicety; the head is accurately shaved and carefully covered with folds of linen wet with a lotion to which spirit of rosemary or some odoriferous tincture has communicated an agreeable and refreshing smell; but when you come to examine the patient, you find his head smoking and the heat of his scalp increased. The nurse applies the lotion once every half hour, or perhaps not so often; indeed, she seldom repeats the application until her notice is attracted by the steam rising from the patient's head, or until she herself, awaking from a comfortable sleep, and going over to examine the state of the patient's head, finds the folds of linen which cover it as hot and dry as if they had been hung

before a fire. Whether applied to reduce local inflammation in any part of the body, or to cool the scalp in determination to the head, cold lotions as ordinarily employed do infinitely more harm than good. The cold is applied at distant intervals, its effect soon ceases, and reaction constantly takes place, leaving the part as hot or even hotter than it was before.

If you put your hand into snow for a few moments, and then take it out, it quickly resumes its natural heat; and if you repeat this at considerable intervals, so as to give time for reaction to occur, the vessels assume a more energetic action, and it becomes hot and burning. If you continue to keep it in the snow for a long time, its heat becomes completely exhausted, reaction does not take place until after a considerable period, and very slowly, and the hand remains at a very low temperature for a good while. Bear this in mind, for it will direct you in the application of cold to reduce local heat. If cold applications be used at such intervals as to allow the scalp to react and resume its heat, rely upon it, it is much better to forbid them altogether. Where you wish to apply cold with effect, let it be done by relays of folded linen, wet with any frigorific mixture, and repeatedly applied to the scalp so as to leave no smoking, or, what is much better, get three or four bladders, put into each a quantity of pounded ice, and apply one over the crown of the head, one on each side, and lay one on the pillow for the back of the head to rest on.

There is a vast difference between a thing being done and its being well done, so it is with regard to cold lotions; so difficult is it to ensure their proper application, that I have entirely given them up in hospital practice, and rarely order them in private. I have been induced to abandon them in consequence of witnessing so many instances in which my directions were neglected, and consequently the cerebral congestion was augmented by their mal-application. Another serious inconvenience frequently arises from their use when applied in a slovenly manner, which is the danger of cold arising from the pillow and bed-clothes being wetted.

It is a curious fact that the head is the only one of the three cavities with respect to which long established custom has laid down the maxim, that when its contents are inflamed we may cool the surface over it, while, in inflammatory affections of the thoracic or abdominal viscera, this practice is avoided as dangerous and inapplicable. Latterly, however, some medical men have been inclined to question the grounds on which cold applications have been rejected in the two latter cases, and some have even declared that they have used ice poultices in inflammations of the chest and belly with great success and perfect safety. I am not as yet prepared to adopt this practice, although I must confess that a review of the subject might incline me to give up my pre-

judices on this point. It is certainly but reasonable to think that what is true of the one may be also true of the other, and that the application of cold to the head and heat to the chest and belly has nothing in its favour beyond mere custom. It should be recollected, however, that the head and face are more accustomed to cold than the chest and belly, and hence are less liable to any mischief likely to arise from its application in an intense degree. Still I am inclined to think that there is much prejudice connected with the practice of applying cold to the head; and I have very little doubt that if the matter was properly investigated, and a number of experiments made, it would lead to the abandonment of cold applications in most inflammatory diseases of the brain. In fevers, I can say positively that in the majority of cases they are positively injurious, *as usually applied*; sponging the bare scalp with tepid or warm vinegar and water, or *even frequently repeated steeping of the head and temples* will often succeed much better in abating the head-ach and restlessness of fever than any cold applications whatsoever. In 1832, a violent influenza, accompanied by most distressing head-ach, attacked thousands in Dublin; this intense pain in the head was relieved by nothing so effectually as by diligent steeping of the temples, forehead, occiput, and nape of the neck *with water as hot as could be borne*.

I do not speak here of the application of cold to the head, for the purpose of relieving local heat and inflammation, but to produce an effect on the whole system. Cold thus applied is of decided and unequivocal value. You are aware that in cases of fever accompanied by symptoms of high mental excitement and great heat of skin, the use of cold dashing has produced the most extraordinary effects. Again, if a patient has taken too large a dose of prussic acid or any other narcotic, the best mode of rousing him is by pouring water on his face or chest from a height. In Turkey, if a person happens to fall asleep in the neighbourhood of a poppy field, and the wind blows over it towards him, he becomes gradually narcotised, and would die, if the country people who are well acquainted with this circumstance did not bring him to the next well or stream, and empty pitcher after pitcher on his face and body. This occurred to my friend, Dr. Oppenheim, during his residence in Turkey, and he owes his life to this simple but effectual treatment.

To conclude, gentlemen, I may observe that sleeplessness in a chronic form is often produced by dyspepsia, and can only be relieved by the means suited to indigestion. Here it is that small doses of blue pill and tonic purgatives are of infinite service, combined with change of air, of scene, and an appropriate diet. In many females, sleeplessness is combined with menstrual irregularity, and can only be cured by means calculated to invigorate the health and restore the catamenial

discharge to its natural periods and quantity, for the nervous system suffers equally whether they be suppressed or overabundant. It is singular how long sleeplessness often continues in chlorosis without inducing those serious consequences that are produced by this symptom in other morbid states of the system. In such cases much is sometimes accomplished by means of the common preparations of morphia, or by the use of Hoffman's liquor (liquor æthereus oleosus), camphor, and other medicines that act upon the nervous system. It must be confessed, however, that these and every other expedient to obtain sleep often fail in chlorotic and hysterical females, in whom relief is only obtained by a gradual improvement of the general health and menstrual function.

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LECTURES

ON

*MIDWIFERY & THE DISEASES
OF WOMEN AND CHILDREN,*

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

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LECTURE XXIII.

Treatment after Labour—Lactation.

GENTLEMEN,—In my last lecture I endeavoured to impress upon you the great importance not only of ascertaining whether the uterus has contracted, but also whether it *remains* so after labour. I instanced to you the melancholy fate of a Crown Princess of Austria from this cause; and there is every reason to know that a Crown Princess (if we might so call her) of this kingdom was lost in a similar manner, and under remarkably similar circumstances. The sad event to which I allude is so recent as to be almost within the recollection of some of you. Before proceeding further, I find that there are some observations on the management of the placenta which I omitted in my last lecture, and which require notice.

When the placenta is detached it presents itself to the os externum, with its smooth surface outwards: it is, in fact, inverted. Mauriceau, La Motte, Stein, sen., and others, were all in the habit of delivering the placenta immediately after the birth of the child. This method cannot be too strongly deprecated, for besides putting the patient to unnecessary pain, by introducing the hand into the uterus, we run the risk of injuring this organ by prematurely tearing off the placenta, and thereby inducing inflammation and organic disease, besides incurring, at the moment, no slight danger of hæmorrhage.

After the separation of the child from the mother, the accoucheur should take the cord in his left hand, and pass the fore-finger of

his right hand along it into the vagina. If he feel the spongy mass of the placenta within reach, he may pull gently with his left hand, pressing the cord towards the hollow of the sacrum with the fore-finger of his right hand, which will then act as a pulley, and enable him to pull the placenta in the axis of the superior aperture of the pelvis. If it follows, well and good, but if it resists, he must not continue to pull, but wait patiently for the accession of fresh pains, which seldom fail to detach it. When the placenta presents itself at the external opening, instead of continuing to extract it by the cord, we should grasp it with the thumb and four fingers, and turn it round three or four times as it comes out; by this means the membranes are twisted into a cord and come away entire. If this be neglected, and the placenta brought away at once, the membranes are apt to be torn and pieces of them left behind, which, by all means, should be avoided, for they not only produce a highly fetid discharge, and frequently a considerable degree of fever; but, when expelled, they create much alarm in the patient's mind, and frequently bring the practitioner into disgrace with the family.

After labour, the nurse must wash the external parts with a sponge and warm water, in doing which she should be careful never to wipe from the pubes backwards, for if there be the slightest laceration in the perinæum, as is almost always the case in primiparæ, it causes considerable pain; hence, in cleaning her patient, she must always carry her sponge or napkin from behind forwards.

In twin cases, when the first child is born, and, upon placing our hand upon the abdomen of the mother, we perceive that there is still another child in the uterus, it is commonly directed that we should make two ligatures upon the cord;—as I before said, I believe this to be a useless precaution. Twin births are decidedly more dangerous than single ones; the uterus is more distended; the part where the placenta is attached is of greater extent; hence there is greater danger of hæmorrhage, &c. Generally speaking, the placenta of twins form one mass, which is the contrary of what is usually taught in the works on midwifery, although, at the same time, they have no connexion with each other. We cannot be too cautious how we extract the placenta of twins. Although the cord will often seem to follow when we pull it, still we must not do so, for prolapsus or inversion of the uterus may be the result. We must twist the two cords together, as thus we shall pull them equally, and avoid the chance of rupturing either. The placenta, also, are more equally detached, and come away better. When they approach the os externum, the same rule must be followed as where there is but one placenta; they must be grasped by the whole hand, and rotated four or five times to ensure the membranes coming away whole. Where the abdomen has been much distended, it is recommended

to bind a broad band round the patient. In twin cases, this should be done after the birth of the first child, and gradually tightened as it diminishes in size, in order to give support to the uterus and abdominal parietes.

I will now call your attention to a few other points, which, although not perhaps of such absolute necessity as the directions which I have just given respecting the management of labour, are nevertheless highly important, and should be held in mind by every practitioner who enters the lying-in room of a patient. The directions for the conduct of an accoucheur towards his patient at the time of labour, which Dr. Dewees has given, are so excellent that I shall quote some of them; the rest, as well as the whole chapter on this subject, I recommend to your attentive perusal.

“1st. Let all communications to the patient of a delicate nature be conducted by a third person; the nurse, when present, should be that person—in her absence, any elderly friend.

“2nd. Endeavour, by a well-chosen conversation, to divert the patient's mind as much as possible from the purpose of your visit, when your services are not immediately required.

“3rd. When your presence is not absolutely necessary in the sick room, be as little in it as will be consistent with your duty to your patient; by this you may remove restraint, and apparently abridge the period of your watching.

“4th. Should the situation of your patient, in your opinion, require to be ascertained, let the proposition be made by a third person—as the nurse, and urge, in defence of the request, all the circumstances which led you to believe it would be important, as the length of time she had been in labour, the force and frequency of her pains, the evacuation of the waters (if it had taken place), and, above all, to ascertain the progress of the labour, and whether the presentation be a proper one.

“5th. If, after you have made your examination, you should be importuned for your opinion of the nature of the presentation, and the duration of the labour, do not commit yourself by any positive declaration, unless you are certain of the first, and pretty sure as to the latter.

“6th. Before you proceed to the examination, let your patient be placed with the most scrupulous regard to delicacy, as the slightest exposure is never necessary.”

Lactation.

As soon after labour as can conveniently be done, the patient's wet linen should be removed, as far as is possible without disturbing her too much, and clean well-aired clothes substituted. She should be left to the most perfect quiet both of body and mind, in order that if possible she may have some sleep; for, as Carus well observes, the refreshment of sleep seems to be the most powerful and natu-

ral means of inducing full contraction of the uterus. When these arrangements have been made, and the patient has enjoyed two, three, or more hours' sleep, it is important that the child should be applied to the breast as soon as possible. Its mother's breast is the most natural position for a new-born child, for at this tender age it is not capable of supporting its own heat. Thus we see in many animals, that for a certain period after birth the young ones shelter themselves beneath their mother to preserve a degree of warmth, which of themselves they could not produce at this early age. “Every mother who has been strong enough to carry and nourish her child during the nine months of pregnancy, is also strong enough to afford it the breast for some time after birth*.” The child can suck the moment it is born, for the power of instinct is quite as strong in this case as in the brute. If healthy and vigorous it immediately seeks for its mother's breast, and, if it does not find it, it sucks at every thing which touches its mouth, even its own little hand, or the finger when presented to it.

Before speaking of the management of the breasts, it will be necessary to give you a short description of this organ. The breast consists of a large conglomerate circumscribed gland, mixed with a considerable quantity of fat; the glandular substance is composed of a congeries of small convoluted arteries, veins, and nerves; the ultimate arteries, before they terminate in their correspondent veins, detach minute branches for the separation of the milk, which, uniting as they proceed to the nipple, form small canals called *lactiferous tubes*, these are about seven or eight in number, communicating with the basis of the nipple, and generally opening at its apex by the same number of ducts, though sometimes two of them open by a common orifice. The ducts adhere to a strong ligamentary elastic substance, which is continued from the gland and terminates with the ducts in the nipple; this ligamentary substance, and these ducts which it contains, are capable of extension and contraction to a great degree, and in their natural state are moderately folded, curled, or corrugated, by which mechanism the place of valves is supplied, and the involuntary eruption of milk prevented, unless the distending force be very great, from the accumulation of too great a quantity. The whole substance of the nipple is spongy, elastic, and subject to different changes, becoming sometimes hard, sometimes flaccid, sometimes flat and sunk into the breasts, and sometimes prominent; its outward surface is prominent and full of small tubercles; the nipple is surrounded with a disk, or circle, of a different colour, called *areola*, and on the inside of the skin of the areola are disseminated little glands, known to anatomists by the name of sebaceous glands; these supply an oily mucus to defend

* Boer.

the areola from abrasion, which would otherwise be the consequence of suction, and likewise to glue up the mouths of the lactiferous tubes; the skin upon these parts is extremely thin, and consequently the nervous papillæ lie very bare, and are very liable to irritation*. The breasts usually contain more or less milk before the patient is delivered, or at least soon after her labour, this is called *colostrum*; if the child be applied in three or four hours after, or, in fact, as soon as circumstances will permit, it draws this gradually out, and, by the repeated and agreeable excitation of sucking, induces a gentle secretion and evacuation of milk from the breast, so that it is never too empty or too much distended; hence the mother is spared the pain and accompanying milk fever, which would otherwise occur. The advantages of this early application of the child to the breast (says Dr. Dewees) are 1st. the child retains the early faculty of sucking with which it is born, for if this be not attended to for several days, because (as they say) the mother has no milk, it will lose it, and much trouble be given to recal it. I have witnessed this but too frequently. 2dly. It will, by its gentle action upon the nipple, gradually stretch it, and accustom it to this extension before the breasts become swelled with milk, and tender from distension. 3dly. By its mouth stimulating the nipple an earlier secretion of milk will take place. 4thly. The milk will be drawn off as fast as formed, which will prevent the pain which constantly arises from its accumulation, as well as the swelling which is almost sure to follow its formation; this swelling shortens the nipple, and renders the extraction of the milk more difficult, this increases the efforts of the child, by which the external covering of this important little body becomes irritated, and sore nipples now ensue to the great misery of the mother. 5thly. The early secreted milk has a purgative quality attached to it, by which the infant profits, by its assisting to carry off the meconium. This milk fever, which people think so necessary for obtaining a supply from the breast, is merely the result of their own neglect; if the child be not applied no fulness of the breasts is perceivable, and a small quantity of watery fluid only comes out; at length, if the breast be not drawn, it swells, the face flushes, the skin becomes hot, and all the common symptoms of milk fever are induced. "It is not to be wondered at," says Mr. C. White, "that a secretion, which has been so many months in preparing, and which is intended to flow in such large quantities for so many months to come, should, if driven back, in a few days occasion a fever, especially when we consider that the milk, which is secreted in the breast for several days after delivery, is, when in its purest state, thin, stimulating, and purgative, for the wise purpose of cleansing the child's stomach and bowels of those viscid blackish

green fæces, called *meconium*, and that this milk must be rendered very acrid by its stagnation in the breasts for several days together." "I have observed, says Dr. Hunter, "in women, who do not give suck, and in nurses, after they leave off suckling, that the axillary glands become painful, swell, and sometimes suppurate; is not this owing to the acrimony which the milk has acquired by long stagnation in the breast, and affecting the gland through which it must pass in absorption? I have observed, too, that they are at the same time liable to little fevers of the intermitting kind, but very irregular in their return, which come on with a rigor and go off with a sweat, are not such fevers raised by absorption of acrid milk?"

As often as the child feels thirsty, or in other words hungry, it betrays evident signs of wanting the mother's breast, this one can instantly perceive, if the child be lying by its mother's side, and enjoying the warmth of her body; in fact, the maternal warmth is as necessary to its well doing, as the wing of the hen to the newly hatched chicken; children suck best when lightly but sufficiently warmly clad, have their feet and hands free, and can lie by their mother's side. Whatever renders the nipples soft and tender renders the operation of sucking difficult, because the child can draw them out too easily; we should rather endeavour to have them firm and less sensitive of irritation, just as they would be if they had not been always covered by the dress from the earliest childhood, and thus rendered perfectly unfit to perform the office designed them by nature. The best means of obtaining this object is by means of exposing them frequently to the air during the latter months of pregnancy, and by dabbing them occasionally with cold water, mixed with a little lavender water, or eau de Cologne. If the patient do not suckle her first child, nor have her breasts drawn, she will seldom have much milk secreted in her subsequent lyings-in, and what is secreted will easily be absorbed.

In a few hours, therefore, after delivery, as soon as she has had a little rest, she should sit up in bed, with a bed-gown thrown over her shoulders; if she proposes to suckle her child it should now be laid to her breast, *whether there be signs of milk or not*; this should be repeated every four or five times a-day, but at night it is not necessary either that the breast should be administered, or that any kind of food should be given to the infant. After the first six or eight weeks, when the child ceases to be indifferent to the surrounding objects, and now begins to notice and express its pleasure by smiling, the mother should suckle it at certain hours, and accustom it to go without during the intervals; for instance, it should only be applied every three or four hours; the intervals of suckling should not be guided by the convenience of the mother, but by the wants of the child. The patient should lie very high with her head and shoulders, and

* C. White on Lying-in Women.

should sit up in bed when she takes her food, and as often as she suckles her child, and should kneel whenever she has occasion to pass water, which should be done frequently; this frequent upright posture is of the utmost consequence, and cannot be too much enforced, it prevents the lochia from stagnating, the stools and urine from being too long retained, and promotes the contraction of the uterus, together with that of the abdominal muscles; the patient, moreover, should keep her breasts and shoulders well covered, in order to promote the secretion of milk.

Nothing can be a more mistaken notion that it is always necessary to add rich and stimulating food to the diet of a woman who is suckling; the stomach thus soon becomes overloaded and deranged, and so far from producing an increase in the secretion of milk, the reverse is the case, and diminution is the result; this is not infrequently observed among wet nurses. A healthy young woman, accustomed to a country air and life, is induced to take a wet nurse's place in town. She is now confined in a great measure to the house, takes little exercise, keeps later hours, eats, *ad libitum*, of better and richer food than she has been accustomed to, and, in order to keep up her milk, is allowed a certain quantity of porter daily. With all this, her milk, to the surprise of her mistress, diminishes in quantity, and, under the supposition that more support is still required, a glass of wine is perhaps recommended, in addition to what she had before. The result of all this is, that the bowels become deranged; she suffers from severe throbbing headach, the face is flushed, the skin hot, and the pulse full and hard; under these circumstances, the very means which have been used to increase her milk, have had the effect of diminishing its secretion. Purgatives, strict antiphlogistic regimen, and, in some cases, even venesection, must be had recourse to, before we shall succeed in restoring the milk to its former quantity. In saying this, gentlemen, I do not pretend to deny that a moderate increase of food, more especially mild unirritating fluids, have a considerable effect in increasing the quantity of milk, the patient, moreover, requires this addition to support the drain upon her system which has now commenced.

One of the chief causes of misery among new born children, is a want of that degree of cleanliness so necessary to health. In washing the child immediately after birth, it is sometimes very difficult, or even impossible, to remove the smegma or vernix caseosa by mere soap and water; a little pork lard, or cold cream, is generally used in such cases, but this only makes the child greasy, which is not desirable. In the district of the Lower Rhine, and in France, they heat a little white wine in a cup with a piece of fresh unsalted butter, and rub the child with this liniment, which effectually removes any vernix caseosa which may adhere to the skin. This is a practice of some anti-

quity in France, for Portal mentions a case where it was used as early as 1667, and Dionis, who published in 1718, mentions it also. The child cannot be kept too clean. It is impossible to expect that a hired nurse can take so much care of a child as its own mother, and this is one of the many reasons why children of rank do not thrive so well as those of the middling classes who are nursed by their own mothers. The nursery cannot be kept too clean, or the air too pure; the room should be spacious, and, above all, have plenty of light, for this great agent of life is quite as necessary for a child as for a plant. Under the care of a nurse, also, the person of a child is never so clean as when its mother takes charge of it herself. From neglect of this sort we frequently see the skin at the groins, between the thighs and nates, behind the ears, &c., become excoriated, and the poor little thing is kept in a continued state of irritation and uncomfortableness; no wonder that its health soon suffers.

It is frequently a question how long a child ought to be suckled. The teeth begin to distend the gums towards the seventh month; this is known by the increased secretion of saliva, and by the child putting every thing into its mouth which it can lay hold of. This is pure instinct. It will now take a piece of soft bread more eagerly than the breast, nor does it seem to care so much for a diet which is entirely fluid. In the ninth or tenth month it becomes still less inclined to suck, and the milk generally begins to decrease in quantity.

So much, gentlemen, for the observations on lactation which I think it necessary to make at present; at a future part of the course, when I come to speak of diseases of children, especially during the first month, I shall then enter more fully into this subject.

After labour, most women, except primiparæ, are liable to spasmodic pains about the uterus, varying considerably both in severity as well as in the frequency of their occurrence. These are called *after-pains*, and are considered to arise from the presence of coagula in the uterus, which irritate and excite it to contract and expel them. During one of these attacks of pain the uterus is harder than at other times, and even tender to the touch, and we must be very careful to distinguish them from the pain of inflammation, which they frequently resemble considerably, and even occasionally pass into. Although the abdomen is tender on slight but sudden pressure, yet, if *gradually* applied, you will find it capable of bearing a considerable degree of pressure, not only without increasing the pain, but even with the effect of lessening what she is already suffering from.

It is generally supposed, as I have already mentioned, that these after-pains are produced by the presence of coagula lodging in the uterus, and to a certain extent this is the case; but we not infrequently see the severest after-pains where the uterus must be tolerably

free from coagula, and it is to Dr. Burton, of York, that we are indebted for some very curious observations upon this subject, by which, in my opinion, one of the causes at least is satisfactorily explained. "Upon the expulsion of the child and placenta, the orifices of the uterine sinuses must contract, and thus retain the grumous blood which is in them; hence the use and benefit of these after-pains, which, by stimulating or compressing the vessels and muscular fibres, make them exert their force to squeeze out this grumous blood, which otherwise might remain there and occasion inflammations, suppurations, &c., from all which we find that these after-pains are necessary towards removing or preventing an inflammation of the womb; therefore we must not be too forward in giving strong opiates and other internal medicines which may take them off, while this grumous blood is lodged within those sinuses. I doubt not but those patients who die from the eighth to the fourteenth day, whose uterus has been inflamed with the symptoms above mentioned, have been injured by the too free use of opiates." Dr. Burton mentions a case to which he was called about an hour after delivery on account of very severe after-pains. Having introduced his hand with some difficulty, he found a piece of placenta still adhering to the fundus; this he gently removed; "in doing this," says he, "I perceived several small membranous strings, as I then thought them, adhering to the uterus; but I was soon undeceived, for upon expanding my fingers, by which I stretched the womb a little, several of these came into my hand, which I drew out, and found what I had imagined to be membranes to be only oblong grumous blood resembling fibres, like those that adhere to a spatula after stirring arterial blood in a basin for some time. I introduced my hand a second time, and made the experiment again, but found none of these little clots within the cavity of the womb; yet upon expanding my hand, several came out of the orifices again, which I could plainly perceive, and after keeping my hand there a little while I brought away all there were within the cavity of the uterus, and the patient's complaints immediately abated, and she recovered very well from that moment."

I have quoted this case, gentlemen, merely to illustrate the author's meaning, since the severity of the cure must almost always be a sufficient reason for our not putting it in practice. By being very cautious not to hurry the last stage of labour, and by allowing the uterus to contract and diminish its bulk as gradually as possible, we shall give the sinuses time to discharge their contents, and thus, upon the same principle as explained by Burton, we shall prevent the after-pains from being severe. It is partly to this cause that I attribute the rarity of after-pains in any degree of severity at the General Lying-In Hospital. Opiates for after-pains, which in some institutions are considered as a necessary

part of the treatment in every labour, are never given, except in cases which absolutely demand their exhibition, and this is of comparatively rare occurrence. After-pains are never more certain or severe than after a very quick labour. Upon the same principle we should be careful not to hurry the expulsion of the placenta, and to enforce that admirable rule laid down by Mr. White, of Manchester, that the patient should always sit up to suckle her child and to take her meals. Where much suffering and restlessness is produced, fifteen or twenty drops of laudanum in a little peppermint-water, or from five to ten grains of Dover's powder, will generally give complete relief.

Reviews.

Outlines of Botany, including a General History of the Vegetable Kingdom, in which Plants are arranged according to the System of Natural Affinities. By GILBERT T. BURNETT, F.L.S. In 2 vols. 8vo. pp. 518, 622. Churchill. 1835.

MR. BURNETT is so well known to the botanical world as a teacher of botany, that his name is a sufficient introduction to the present work. Botany is one of the most fascinating of sciences; it explains to us the nature of that large extent of beings spread like a rich carpet on the surface of the earth; which covers rocks, and mountains, and valleys; and which makes a wilderness a scene of admiration to the philosophic mind. It is a study of consummate delight; we reflect on the tree that contained the poor bird's nest; the beautiful plants that grow in our gardens, with all their variegated colours, surpassing all the richest painting that can be executed by art. But it contains, to the medical philosopher, treasures of higher value. Plants afford nutriment for a large majority of animals; to man they give some of his most luxurious dishes; and they contain panaceas for many of the diseases of his frame. Botany has, since the earliest records of man, been a subject of study, but, like all other branches of science, it has recently made rapid marches. The artificial arrangements of Linnæus and of Jussieu have greatly facilitated its study; they are the sign-posts to its goal, and the groundworks for its comprehension.

The present work appeared about two years ago in the form of numbers, and is now brought out in two octavo volumes. We shall present the reader with a few of its contents, and comment on them as we proceed. After apologising, in the strain of modest authors, the following are announced as deviations from the usual methods adopted by botanic writers:

"The difference adverted to chiefly consists in giving the *subjective* precedence of the *objective* view; and, considering subjective botany in general to be distributable, like other

branches of natural history, into several subordinate sciences, each devoted to the especial study of one great natural group of plants; the structure, functions, and uses of which will, collectively, form a complete, though subordinate science, as well as, disjunctively, constitute the several parts of general vegetable physics, of systematic and economic botany."

There is a semblance of pedantry about the composition of this sentence that is offensive to our ears; the same character pervades the whole work, but fortunately it is more easy, light, and amusing. There is also an attempt to elevate the science of botany higher than, perhaps, it deserves. But we can readily excuse this; an author, or a teacher, if he does not express an interest in his subject, cannot, we believe, feel it, and most assuredly will not create that sentiment in others. A few of the first sentences will convey the general character of the style:—

"(1.) Botany, superseding the ancient *herbcraft*, is the name now given to the science which relates to all those inferior ranks of the organic creation called PLANTS, or *vegetables*.

"(2.) But what is a *plant*? What do we mean by this word *vegetable*? It is a term which the most ignorant presume they understand, although the most learned are unable exactly to define; for a plant is, indeed, as Theophrastus long ago observed, 'a various thing, of which it is difficult to give a definition.'

"(3.) Tell a clown it is difficult to distinguish an animal from a plant, he will smile incredulously, and perhaps will say, 'Can I mistake *man-orchis* flowers for men?' but show him a *conferva* and a *polype*, a *lichen* and *corulline*, a *flustra* and a *flag*, or even a *mushroom* and a *medusa*, and he will at once confess, at least by silence, if not by words, that he 'kens not which they be.'

"(4.) Such presuming self-confidence in what they know, is 'the badge of ignorance and the curse of fools:' it is the humble privilege of the wise alone to doubt; and they who know the most are always the most sensible how little the most enlightened know.

"(5.) But this matter is apocryphal, not to the unlearned and the ignorant alone; physiologists the most astute have laboured, and do labour still, in vain, succinctly yet comprehensively, to define a plant. The difficulty, however, lies not so much in the perception of the differences which undoubtedly do exist, as in reducing these perceptions to the progressive scale of a still very imperfect language. The dilemma somewhat resembles that in which an ancient philosopher is said to have been involved; who, when desired to state what motion is, after much consideration, rose from his seat, walked towards the inquirer, and replied 'You see it; I can show it to you; but I cannot tell you what motion is.' Thus also, to the opening question, a botanist might answer, 'Here are plants; you see them; I

can show them to you, even if I cannot precisely tell you what a vegetable is.'"

In the first section, when treating of the "*algæ*," the subject of where life begins in matter, and what are the very lowest links of life, and of the theory of Brown on motions which are carried on in dead matter, "who has shown, by a most unexceptionable series of experiments, that locomotion, even when apparently independent of external forces, may and does exist among particles that are absolutely lifeless, nay, which have never been alive; so that, should not this phenomenon admit some more probable solution, it would seem that the long established definition, which declares matter to be inert, may perhaps require a serious modification." Mr. Burnett suspects that such motions are not active, but derived from external forces, for that if hermetically sealed between two plates of glass, so as to prohibit every obvious external action, yet that motion may be communicated in a similar manner to the expansion of bodies by heat, the insonorous vibrations of the air, and "just as many atmospheric changes are notorious with the water that are utterly inappreciable with the mercurial barometer."

Further curious, though speculative, topics are dwelt upon at considerable length, greatly so for a "*Vademecum*," or "*Outlines of Botany*." Examples of living existence in matters which were not long ago believed to be lifeless, are given.

"(41.) For example, the slimy matter often seen on rocks and stones, on hard gravel walks, and on damp walls and cellars, or on the glass of windows, garden pots, and so forth, and which is often so minute as to be lost to ordinary vision, consists of curious and most admirable vegetable structures. All the green pulverulent coating seen on old trees and palings is also found, by microscopic observations, to be composed of an infinite number of small plants, of an exceedingly primitive formation."

The observations at page 38 are abstruse reflections, but enticing much to the study of botany,—they give it its chief charms.

"(51.) Linnæus called the *algæ vermaculi*, or bond slaves, regarding them as being fettered to the rocks on which they grow. The title is particularly appropriate, and especially when applied to the lichens, which are, as it were, chained to the soil they labour to improve for the benefit of others, though from it they derive no nourishment themselves.

"The first conquests of life over death, the first inroads of fertility on barrenness, are made by the smaller lichens, which, as Humboldt has well observed, labour to decompose the scorified matter of volcanoes and the smooth and naked surfaces of sea-deserted rocks, and thus to 'extend the dominion of vitality.' These little plants will often obtain a footing where nothing else could be attached. So small are many, that they are in-

visible to the naked eye, and the decay of these, when they have flourished and passed through their transient epochs of existence, is destined to form the first exuvial layer of vegetable mould; succeeding generations give successive increments to the soil, thus forming, from which men are to reap their harvests, and cattle to derive their food; from which hereafter forests are designed to spring, and from which future navies are to be supplied.

“But how is this frail dust to maintain its station on the smooth and polished rock, when vitality has ceased to exert its influence, and the structure that fixed it has decayed? This is a point which has been too generally overlooked, and yet which is the most wonderful provision of all: the plant, when dying, digs for itself a grave, sculptures in the solid rock a sepulchre in which its dust may rest. For chemistry informs us that, not only do these lichens consist in part of gummy matter, which causes their particles to stick together, but that they likewise form, when living, a considerable quantity of oxalic acid; which acid, when by their decay set free, acts upon the rock, and thus is a hollow formed in which the dead matter of the lichen is deposited. Furthermore, the acid, by combining with the limestone, or other material of the rock, will often add an important mineral ingredient to the vegetable mould; and not only this, the moisture thus conveyed into the cracks and crevices of rocks and stones, when frozen, rends them, and, by continual degradation, adds more and more to the forming soil. Successive generations of these bond-slaves successively and indefatigably perform their duties, until at length, as the result of their accumulated toil, the barren breakers, or the pumice plains of a volcano, become converted into fruitful fields.”

Mr. Burnett's book is unquestionably not a work that will interest students, it is too scientific. Medical students, as the author is well aware (or at least the majority of them), will not devote that period to the study of the subject that it really demands. They wish but for as much botanical knowledge as will enable them to pass a creditable and general examination. With this they are satisfied. Students are the chief purchasers of such works as the present, and we must confess that, under those circumstances, we should be cautious in recommending Professor Burnett's two large and closely printed octavo volumes. Few men could have executed so talented a work. It reflects very great credit on its author, and will raise him into higher estimation in the scientific world than he even at present enjoys. The general arrangement of the book has been heretofore noticed, we shall therefore not again refer to it.

A Practical Compendium of the Diseases of the Skin, with Cases; including a particular Consideration of the more frequent and intractable Forms of these Affections. By JONATHAN GREEN, M.D. Pp. 371. 1835. Whittaker.

Dr. Green is known to the profession as having an extensive practice in skin diseases, and as having extensively employed vapour baths of various descriptions for their cure, and with what success the present production informs us. Perhaps few affections of the body are so imperfectly understood as those of the skin. Our countryman, Willan, was, we believe, the first to form a classification of their various forms, so as to reduce them to a systematic order, that they might be more readily described and comprehended. He divided them into eight orders, viz. papulæ, squamæ, exanthematæ, bullæ, vesiculæ, pustulæ, tubercula, and maculæ. These names were found to be, with but a few exceptions, descriptive of the elementary lesions of the characters which they ordinarily present. Since that period the same classification has been adopted with some but trifling modifications. Some few Dr. Green has transposed. He has removed erysipelas from the class bullæ, and placed it as an exanthematous disease; this had been done before by Bielt, who considered the vesications to be not necessarily existent, agreeing with Mr. Lawrence that erysipelas and erythema should be in the same order. The author places scabies under vesiculæ, removing it from the pustules, with some other minor transpositions, which, though not very important in practice, yet, as a philosophical classification, should be done. But these same corrections had been made by Bielt, as may be seen in his large work of 1828, published by two of his friends. The following is the author's classification of the diseases of the skin in their simple and complicated states:—

“Forms of inflammation of the skin, and diseases which appear under these severally.—Exanthema: erythema, erysipelas, roseola, rubeola, scarlatina, urticaria. Vesiculæ: miliaria, herpes, scabies, eczema. Bullæ: pemphigus, rupia. Pustulæ: variola, (including varicella,) vaccina, ethyma, impetigo, porrigo, acne, mentagra. Papulæ: strophulus, lichen, prurigo. Squamæ: pityriasis, psoriasis, lepra. Tubercula: lupus, elephantiasis Græca, cancer, molluscum, frambæsia. Furunculi: furunculus, anthrax, pustula maligna.

“Diseases which appear with the elementary characters of almost all of the above orders.—Syphilis.

“Diseases which are severally types of new and additional orders.—Pellagra, purpura, elephantiasis Arabica, cheloidea (keloide, alib.).

“Original or accidental unusual states of the skin, not referable to inflammation.—Achroa: leucopathia, (albinismus,) vitiligo. Dischroa

(Maculæ, Willan): lentigo, ephelis, chloasma, nævus.

“Diseases of the appendages of the skin; more properly of the parts which secrete and support these.—Epidermis—ichthyosis, unguis—onychia, pili—plica.”

Dr. Green is of opinion that almost all the diseases of the skin have their origin in inflammation, acute or chronic; the insensible perspiration is diminished; the skin from this deficient secretion becomes dry, harsh, and loses that smooth velvety sensation it communicates in health. In every case of acute inflammation the system necessarily participates.

Inveterate chronic diseases of the skin the author believes to exist without any derangement of the digestive organs; in this opinion he accords with Biett and some other continental writers. That disordered digestive organs is a frequent concomitant with such affections we do most potently believe. We have seen it again and again, and though we have not had such extensive opportunities of witnessing the fact as those authors, we believe it to be so. It is the system of those individuals to treat almost all skin affections by vapour baths, simple or medicated, it must therefore be their anxiety to show that local applications are the best remedies, and that physic is of little avail. We do not intend to impute this to dishonesty, or any thing like charlatanism, far from it; but there is a disposition in some men's minds to be warped by a particular theory, to ground their practice upon this, and to practise very successfully with one system, to cure nine out of ten cases, for example, as Abernethy did, of palpitation of the heart with blue pill and black draught; whilst another man was equally successful with a very different plan of treatment. In the Hôpital St. Louis, in France, the average number of baths given annually is 150,000, but internal medicines are also employed, though it must be confessed they are generally very mild, and sometimes must be inert.

Dr. Green admits the utility of purgative medicines, by acting as *derivatives* only. Sulphur has fallen in its reputation, he thinks from its being exhibited in too large doses, so that it empties the bowels and passes off before it can exert its specific influence upon the skin. Mercury he believes is highly abused in this country, we think so too. Diet drinks he regards as mere diluents. Acids he has found of great advantage, as acidulated drinks. But the great remedy is baths, they are simple or medicated, and the same title is given to the vapour of water and the fumes of different medicinal substances, as of mercury, sulphur, chlorine, &c., applied in a proper apparatus to the surface of the body. The partial application is entitled *douche*.

At the end of the work are some of the formulæ which the author is in the habit of employing:—

“*Sulphureo-Gelatinous Bath*.—℞. Sulphuret. potassæ, ℥ij—℥iv.; aquæ, cong., xxx.

Add to this solution, ichthyocollæ, lb. i.—lb. ij.; in aquæ bullientis soluta lb. x. M.

“This bath is preferable to the artificial Barége's bath, as it is neither irritating, nor apt to occasion feverishness, which the common sulphureous water bath is.

“A cheaper and not less efficacious gelatine may be procured by dissolving from lb. iss. to lb. ij. of parchment clippings in water, by long boiling, or by using a neat's or calf's feet for the purpose.

“*Emollient Bath*.—To an ordinary tepid water bath add a large basonful of thick gruel or paste, and mix it well with the water.

“One or other of these baths is often of great use in prurigo, eczema, lichen and impetigo.

“*Nitro-Muriatic Acid Bath*.—℞. Acid. nitrici, ℥ij.; acid. muriatici, ℥j. M.

“To be added to the water of a tepid bath, which should then be about as sour as distilled vinegar.

“*Liniments and Lotions*.—℞. Potassæ sulphuret. ℥ij.; sapon. mollis, ℥j.; aq. calcis, ℥viiij.; spirit. vin. rect. ℥ij. M.

“This is a good wash in porrigo especially, but is also useful in many other species of cutaneous diseases.

“℞. Liq. potassæ, ℥ij.; ol. oliv. ℥ij.; aq. rosæ, ℥j. M.

“℞. Liq. potassæ, ℥ij.—℥iv.; aq. rosæ, ℥ij. M.

“These are both of great service in cases of obstinate lepra and psoriasis especially.

“℞. Acid. nitrici, acid. muriat., āā gtt. xx.; aquæ rosæ, ℥vi. M.

“This may sometimes be used with good effect in cases of pityriasis and of chloasma.

“℞. Hydriod. potassæ, ʒss.; spirit. tenuior., ℥j.—℥iv.; aq. rosæ, lb. ss. M.

“℞. Hydrarg. chlolutet. (corrosive sublimate), gr. viii.; aq. rosæ, lb. i.; spirit. vini rectific., ℥j.—℥ij.

“These are both excellent lotions in cases of acne. They may be made with emuls. amygd. amar. instead of rose water.

“A solution of uniform strength for use as a caustic, may be prepared as a caustic:—

“℞. Hydrarg. proto-nitrat. sicc. ℥j.; acidi nitrici, ℥j. M.

“Treat the mercury with the nitric acid, and complete the solution by adding the distilled water; half an ounce is used morning and evening as a lotion in scabies, prurigo formicans, &c. It does not stain the linen. The solution of the mercury in an excess of nitric acid is one of the best caustics and escharotics we possess, in arousing indolent sores generally, and in arresting the morbid actions of phagedænic ulcers, as of lupus, &c.

“*Ointments, Cerates*.—℞. Hydrarg. proto-chlorur. (sub-muriat.), ℥j.; adipis suil. ʒiss. M.

“This is one of the best of all topical applications in lepra, and several other forms of squamous disease.

“℞. Unguent. ceræ alb., ℥ij.; plumbi sub-carbon., ℥ij.; cretæ præparat., ʒss. M.

"A useful application in the acute stages of eczema, impetigo, lichen, &c.

"R. Sulph. sublim., ℥ij.; potassæ subcarbon., ℥j.; adipis suillæ, ℥iv. M.

"Better than the common sulphur ointment in scabies."

The various forms of diseased skin are very accurately described, and as clearly as possible without annexed coloured representations. No description, however lucid, could convey the character to an individual who had not seen the particular disease. Hence the value of such works as those of Willan and Rayer, but unfortunately for many in our poor profession they are much too expensive.

FOREIGN MEDICAL LITERATURE.

REVIEW OF THE GERMAN JOURNALS.

FREQUENT variations may be observed in the health and habits of insane persons, which appear to be intimately connected with the frequent variations in the state of the atmosphere. The study of general causes is therefore very important with reference to the treatment of those affected with mental alienation; nor is it less interesting to compare the action which these general causes have at the same time on the insane, and on persons in the full enjoyment of all their faculties. Such is the object which M. Bird proposes to himself in the memoir which we are about to analyse.

His observations for the year 1831 are too brief and too scanty in detail to afford much interest; however, he remarks that the medical establishment of the House of Health did not always coincide with that of the town, and that in general the cleanly state of the hospital was more satisfying than that of Siegburg itself; but, he adds, it must not be forgotten that their exposition differs, that the establishment of the insane is situated on an elevation of two hundred and thirty feet, and the town at the foot of a hill in a humid atmosphere. For 1833, his observations extend only to July, but embrace a great number of facts worth notice. At this period the medical institution decided to act very nearly the same with respect to the insane as the other individuals. During the first six months the maladies were rheumatic and catarrhal, both of the insane and sound in mind, these latter having, however, a greater tendency to gastric and inflammatory complications, and a greater number of intermittent fevers. In the beginning of July the catarrhal and rheumatic affections disappeared, but many of the insane were subject to a relapse.

In the town, headaches became also more frequent, and it is by no means rare to see cerebral affections, often mortal, associated with intermittent fevers. But it would be endless to follow the author in the enumeration of all the facts which he observed day by day; general reflections supported by observations will suffice.

M. Bird divided the insane into two classes,—those whose brain is primitively affected under the influence of the direct exaltation of the arterial system, the maniacs. Those with whom the brain is affected but secondarily, the first pressure being on the digestive organs, venous system, thence to the arterial system and encephalous organs, the hypochondriac and melancholic.

Cold has a remarkable influence on the insane; thus during January, when the temperature was low, the weather cloudy, or when it snowed, they were all greatly agitated, but became calm as the weather became temperate. But this agitation is much increased and of longer duration in the heat of summer, tendency in the atmosphere to lightning, and, in short, under all sudden and violent changes of temperature they are ever restless and unquiet, yet M. Bird has never remarked the influence of the moon on his patients.

At the approach of spring, all nature seems to receive new life and excitation; to the insane it brings corresponding feelings; the melancholy will at first experience a certain degree of uneasiness and a passing aggravation of their state.

A young man of seventeen, who became insane at the age of puberty, and another of twenty-two, were so bad in the first five days of February, that they ate their fæces and drank their urine as a penance, one of them said, for his sins, at the same time his heart beat violently, the carotids were fuller and more stretched, while, with the exception of his head, which was hotter, his temperature did not appear to have increased.

Nevertheless, as spring advances, in the months of April and May, to their previous state of trouble and agitation succeed a state of calmness and even lucid intervals. Thus a female, continually agitated by fear and anguish, became calm, and resigned herself peaceably to work; another patient, preoccupied with sombre ideas, and whose state manifested a disposition to serenity and even some gaiety, although his melancholy has in a degree diminished, still he has again become hypochondriacal.

The state of trouble and uneasiness which appears in the first days of spring with the melancholy, is Nature's salutary effort to cure the malady; if, then, it is suitably seconded by art, a favourable result may be expected, but both fail generally; and if sometimes transient success is obtained, a relapse is to be feared in the autumn.

It is also under the influence of spring that Dr. Bird has noticed the critical secretions and evacuations, at the termination of which the state of the patient seems ameliorated, at least for some time. An idiot, forty years old, was subject to fits, during which he remained as if paralysed, appeared to have partly recovered his intelligence during March, after an abundant secretion of nasal mucus mixed with blood. Others have found relief after hæmorrhoidal fluxions, the menses long

suppressed, sweats; copious expectoration after catarrh has frequently procured salutary effect.

Favourable as the spring is in some respects to the melancholic, it is less so to the raving and those affected with hallucinations of the senses; the arterial exaltation, the immediate cause of cerebral affections, is then found to augment, delirium is then frequent with many of them, and tendency to congestion of the brain. The best season for maniacs is autumn, and the only time favourable to their cure; the contrary is the case with respect to the melancholic. Nevertheless M. Bird observes that in 1833 the arterial exaltation, cerebral congestion, and the paroxysms of raving, were less frequent and violent, which he attributes to the forbearance of all coercion, the gradual approach of spring, and in many of them to the return of long suppressed secretions and evacuations. The bath is considered by M. Bird as baneful during the cold season, but beneficial during summer.

Dr. Wagner on External Pathology.

This memoir of Dr. Wagner's resolves affirmatively a doubt long existing, namely, whether the carbuncle can be communicated by the ingestion of the flesh of an infected animal. The study of this malady, in which the Doctor has had extensive experience, has led him to conclusions differing widely from the general opinion, but as founded on experience they are entitled to attentive consideration.

M. Wagner having heard, on the 22nd July, 1834, that two persons in the village of Striesa, Prussian Saxony, had died suddenly, that many more had fallen sick, and that in one farm seven head of cattle, with several pigs, had burst, immediately betook himself thither, and has since given the following statement.

July 13th. On the herd of cattle returning from pasturage, the bull fell suddenly prostrate, and was unable to rise again. At first it was attributed to a simple wound in the back-bone; he was immediately killed, and two peasants, Stack, the gardener, aged 40, and Zeinz, the vine-dresser, aged 30, both robust men, and in excellent health, skinned, cut up, and par-took, with several others, of the flesh of the animal as food. Some days afterwards, several other animals belonging to the same farm fell sick in the same manner, shared the same fate, and their flesh was used as food by the same persons. All of them, however, quickly began to complain of uneasy sensations, heaviness in the precordial region, occasional pains in the abdomen, vertigo, &c., especially Stack and Zeinz, who had not only partaken of the flesh of the infected animals, but had handled them, and, in so doing, had been wounded in the hand.

15th and 18th. Several more animals suddenly burst. On examination the abdomen was found inflamed, the spleen gangrenous and putrescent consisted but of one membrane in

form of a sac, containing a thick, black liquid of insupportable odour; in several places under the hide, especially about the neck, were œdematous tumours. No doubt could now exist, that the malady was the true carbunculous affection. M. Wagner gives it the name of "gangrene of the spleen, *Milzbrand*," from the state of that organ as found in all the infected individuals examined; and to the septic humour which appears to generate the malady, "virus of gangrenous spleen, *Milzbrandgift*."

19th. The gardener Stack, though suffering for some days, endeavoured to walk a distance of three miles, which, with the utmost difficulty, he accomplished. Having endeavoured to recruit his feeble state with a draught of malt liquor, he made an effort to return, but was seized with vomiting, pains in the abdomen, and fell prostrate on his back. He was carried home; icy coldness of the extremities, thence to the trunk, supervened; diarrhœa of black liquefied blood; convulsive movements of the head and limbs; legs blue and livid; nose sharpened; eyes hollowed; with great suffering in the abdomen, and repeated vomitings; but death relieved him on the 20th.

On the same day, the widow Gaertner was affected much in the same manner; a black pustule also had appeared on one of her thighs. She was found dead in her bed on the following day, with a child still sleeping beside her and in perfect health. On the 22nd the decomposition of these two bodies was advanced nearly to liquefaction, and, therefore, precluded examination.

22nd. Nine other persons who had either come in contact with the infected animals, or had eaten of their flesh, were attacked with the epidemic; general symptoms and sufferings nearly the same in all. The vine-dresser, Zeinz, had a black pustule developed on the outer side of the thigh, but, with the exception of the sensations arising from this, he did not suffer more than the rest. As the malady with most of these persons had already been of some days' duration when M. Wagner arrived, he found no indications requiring vomits. To the necessitous who were yet free from anthrax, he administered the most simple remedies; cataplasms of linseed and flour of bran in white wine vinegar applied to the præcordial region, infusion of tiglia, or simply water acidulated with white wine vinegar, to promote and sustain a moderate perspiration; abstinence as far as possible. With those in easy circumstances, and with those, also, in whom carbuncles were developed, a more active treatment was necessary. An incision cross-ways was made in the pustules, and, with respect to Zeinz, to the depth of half an inch, cauterised, and the wound sprinkled with strong caustic potass. During nearly the whole operation he was insensible, but was at length painfully conscious of a pricking and burning sensation; the gangrenous scab, which was hard and dry, softened and sunk; a cataplasm of linseed and powdered oak bark in white wine vinegar was

applied; small doses of camphor, and a strong decoction of quinquina mixed with a little of Hoffmann's anodyne liquid mineral.

24th. All the infected were better except one, an old woman, with a pustule on the thumb, which had been cut and cauterised. Every symptom aggravated; the whole arm swelled and inflamed to the shoulder; the fore-arm covered with reddish-blue vesicles; face red and burning; intense fever; diarrhoea; extreme prostration; skin dry and hard; sweetish taste in the mouth. Considering this case as altogether hopeless, M. Wagner only applied a cataplasm of new cheese to the wound.

In place of the gangrenous scab on the thigh of Zeinz was a hollow, half an inch deep, circular and blackish, edge narrow and red; fever gone; appetite, strength, and spirits returned. This rapid amendment was preceded by a general and profuse sweat of infectious odour. The wound was sprinkled with quinquina and caustic potass, dressed with le Baume Arcæus, and recovered with the vinegared cataplasm; internal treatment as before.

29th. Sensibility restored to the infected member, but the gangrenous hollow was of twice the depth, and no separation could be discerned between the unhealthy and the sound. It was now dressed with powdered quinquina, balsam of Peru, brown ointment mixed with myrrh and camphor, and again covered with the vinegared cataplasm.

Aug. 1st. The gangrenous sloughs separated with the bistoury, the wound being three inches in length, two and a half in circumference, and three quarters in depth, of a clear red, and secreting laudable pus.

5th. Begins to be covered with fleshy pimples and granulations of good appearance.

11th. The whole excavation filled with them; occasional torpor in the feet, followed by a pricking sensation.

14th. Cold tumefaction of the integuments of the limb extending to the abdomen. Application *de sachets de son chauffés*; the fleshy pimples have pustulated to such a degree as to require the use of the potassa fusa.

18. Tumefaction subsided; cicatrisation of the wound beginning, and will, no doubt, be soon completed.

The old woman, whose case had been considered as utterly hopeless, two days afterwards rallied considerably, to the great astonishment of M. Wagner. No critical perspiration had here supervened, but the diarrhoea was so excessive as to pass without consciousness. The gangrenous pustule was suppurating: the vesicles on the fore-arm had sunk, and the swelling subsided from top to bottom. Same treatment external and internal as in the preceding case. The general state of amendment proceeded, and so rapidly, that on the 29th of July she could walk above a mile. The local affection was more tardy; the pustule extended all round the thumb to the back of the hand; the scab, though superficial, was hard, horny, dry, and black, and when a part

of it detached itself a few days afterwards, the suppurating surface beneath emitted a foetid odour. It was dressed with powdered quinquina, and shortly afterwards bore a favourable appearance, and thus continued to do; and on the 4th Sept. the cure was completed.

On the 6th of August two more patients had presented themselves, after a lapse of eight days, during which no case of infection either in man or brute had occurred, and while every precaution was in use to prevent the spread of the epidemic. They were two fellow-servants on the same farm, the one 26, the other 50 years of age; and though they had been many times in contact with the infected animals, they had never eaten of their flesh. The elder woman it appears had, while standing beside the infected old woman above mentioned, been stung by a fly in the inner side of the left arm. The little puncture became painful, swelled, and inflamed, and at length assumed the appearance of a dry and livid pustule. The younger woman could not give so decided an origin to the pustule formed on the outer side of the right arm, which was surrounded with gangrenous vesicles, swelled and inflamed from the elbow to the shoulder; but it is necessary to state, that the hide of an infected animal had been found in her chamber. Might not this have been the origin? Might not some particles of the flesh or cellular tissue have been still adherent to the skin, and in its recent state have attracted the flies, whose puncture would then most certainly transfuse the virus? Such facts have been before observed, and examples of them are cited by Bertrandi and Monteggia.

Recourse was had to the same internal treatment as in the preceding cases; but as it was too late to incise the carbuncles, and M. Wagner having found that cauterisation after incision extended the gangrene, he only applied cataplasms of new cheese, or of bran and linseed. The internal remedies were also soon changed, and a beverage of curdled milk substituted, mixed with water, or an infusion of tiglia.

The young woman's fever was of an inflammatory character; and pains in the chest supervening she was bled in the arm. The state of the pustule rendering the application of caustic potass necessary, it was tried, but soon removed, the pain arising from it being too excessive to be borne.

On the 13th of August, after profuse perspiration, the general symptoms, and also the swelling and inflammation around the pustules, subsided with both the patients.

Three weeks after the first appearance of the epidemic, another and fatal case of infection presented itself.

A young man, 20 years of age, servant on the same farm with the females above mentioned, had not only handled infected animals, but had eaten of their flesh. Nevertheless, he continued in good health for a fortnight after the first appearance of the malady; he

was then seized with all its symptoms; a pustule on the forepart of the left arm spread an inch and a half in two days. Profuse sweat amended all symptoms for a short space, but on the 18th they returned, and with such violence, that on the evening of the same day he breathed his last.

In two villages adjacent to Striesa a few isolated cases of the infection were at the same time observed. Four men, in the prime of life, who had not only been in contact with infected animals, but had partaken of their flesh as food, were seized with all the symptoms of the epidemic, but recovered in the course of three weeks.

The following experiment is noticeable. Some fat of an infected animal was melted and thrown to two pigs, two dogs, and two cats; all of them burst while rolling on the grass, which they appeared to do for relief.

From the foregoing facts the author draws these conclusions:—

1st. That the strength, more or less, of the malady depends not so much on the presence, number, and size of the pustules, as on the concomitant fever; the pustules being but a product or symptom of the malady, and may be altogether wanting, and the fever still exist.

2nd. The carbuncular, or splenic fever, with or without pustules, does not propagate itself by means of miasma in the air, but communicates itself by the ingestion of the flesh of infected animals, by contact with them, and by cutaneous absorption. The animal virus, which appears to be the principle of the malady, is fixed, unalterable, not to be decomposed by any process, as the foregoing statements prove.

3rd. Whether the pustules be excised, cauterised, or not touched at all, the concomitant fever and inflammation proceed in their course, and the duration of the treatment is in no degree abridged; but experience demonstrates that violent measures oppose the curative efforts of nature, and may prolong the malady. If the infection be received internally, excision and cauterisation are useless; if on the exterior surface they are only useful in the first state of the pustule, when yet very small; and it is rare that medical assistance is then sought. The topical remedies which proved most serviceable to M. Wagner were, warm emollient cataplasms, or those of new cheese, powdered quinquina, alone, or mixed with powdered charcoal. It is doubtful whether the administration of quinquina and camphor internally be really useful. But, under whatever treatment, the pustule remains ordinarily from four to six weeks; when the infected die it is frequently during a febrile paroxysm. In a slight attack, a vomit has often proved completely efficacious. Milk drunk in great quantity after the ingestion of the infected substance is of use by provoking sickness and vomiting.

M. Wagner attributes the frequency of carbuncular affection, so observable in summer

in the Circle of Schweintz, where he practises, to the great number of pools and ponds of stagnant and filthy water in the vicinity of the Elter, and which evaporate during the great heats.

Reports of Societies.

ZOOLOGICAL SOCIETY.

Tuesday, February 24th, 1835.

WM. YARRELL, ESQ., in the Chair.

A PAPER was read by — Owen, Esq., entitled “A Description of a Microscopic Entozoon infesting the Muscles of the Human Body.”

As the cases, in which these worms have been observed, do not appear to have betrayed any discernible symptoms during lifetime, it would prove of no avail to our numerous readers to detail them. Our author found, on examination, that the whole of the voluntary and semi-voluntary muscles were studded with innumerable white tough specks. These were discovered to be cysts of an elliptical figure, with the extremities generally alternated and more opaque than the body of the cyst, which is sufficiently transparent to allow of a minute coiled-up worm being seen through it. The cysts measure about $\frac{1}{50}$ of an inch in their longitudinal, and $\frac{1}{100}$ in their transverse diameter, and they are generally placed in single rows, at a distance varying from half a line to one line apart. The worm, when removed from the cyst, was usually found to be disposed in two or two and a half spiral coils. When straightened it measured from $\frac{1}{25}$ to $\frac{1}{30}$ of an inch in length, and from $\frac{1}{700}$ to $\frac{1}{800}$ of an inch in diameter. The worm is round and pilliform, terminating obtusely at both extremities, which are of unequal size, and tapering towards one end for about $\frac{1}{3}$ of its length, but continuing of an uniform diameter from that point to the opposite extremity. At the greater extremity a large transverse linear orifice is observable. At the lower extremity no vestige of an orifice could be detected. No alimentary canal or any internal organs were apparent. The structure consisted intirely of a minute transparent external skin, containing a fine granular flaky substance, or parenchyma, highly fragile. There is no projecting spiculum, or hook, observable at either extremity, nor is it discernible that the worm had been torn from an attached cyst.

Mr. Owen made some observations on the value of the genus *Capsularia*, Zed, a genus rejected by Rudolphi, who distributed the species, comprehended under it, into *filaria* and *ascaris*, worms so highly organised as not to admit of the simple form in question being arranged with them. Its simplicity of structure, and the situation in which it occurs, connect it in some degree with the order *cystica* of Rudolphi. But to that order it

cannot be referred, as it does not possess either the complex formation of the head, or the dilated vesicle of the tail. It ought, therefore, to be regarded as representing a new order; the position, however, among the entozoa cannot satisfactorily be settled in the present condition of that class, which is, as now constituted, any thing rather than a natural group. In fact, the new form appears to be even more nearly allied to the vibriones of Muller than to any internal worm hitherto noticed. Mr. Owen, however, refers it only provisionally to the entozoa, and regards it as the type of a genus to be designated *Frichina*, which he characterises, as well as the single species included in it, under the name of *Frichina spiralis*.

Mr. O.'s paper was illustrated by a series of drawings.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 25th, 1835.

Dr. ADDISON, in the Chair.

Umbilical and Inguinal Hydrostatic Trusses
—*Aphonia*—*Headachs*.

Mr. Mart exhibited an umbilical truss, constructed on hydrostatic principles; the water was contained in cells around the circumference of the pad, and also in an elevation corresponding to the navel, the cavities freely communicating; it was admitted by means of a valvular opening. The principal advantage expected was, that if the abdominal muscles should compress the circumference of the pad, during their action, the fluid would be forced into the nipple-like process opposite the navel, and thus more completely restrain the hernia. The contrary was the case with the inguinal truss; the pressure is exerted on its centre, instead of its circumference, during the action of the abdominal parietes, and hence the instrument is so contrived, that when the centre is compressed the fluid is forced into the cells of the circumference, thus giving additional support to the hernia. Mr. Mart remarked, that, with these instruments, it was a moral (query, physical) impossibility that the hernia should escape.

Dr. Leonard Stewart afterwards narrated a case of aphonia of four or five years' standing, and which had resisted the various plans of treatment tried by several distinguished medical men. Dr. S. mentioned the case to Dr. Webster, who recommended the application of leeches to the head, as he considered it to be dependent on pressure on the nerves of the larynx, and so interrupting their functions. The leeches were applied, and when they had dropped off the patient fainted; in the course of that night she fully recovered her voice, which she has since retained. The Doctor considered the disorder was dependent on congestion in the head. Disease in the head pa-

ralysed the extremities, and from the same cause Dr. W. thought the organ of voice might be affected.

Dr. Webster stated his reasons for recommending the application of leeches to the head, and he believed this plan of treatment was more especially applicable when the aphonia was accompanied with fulness of blood and pain in the head, dimness of sight, deafness, &c.

Dr. Stewart observed, that in his patient he had no suspicion of head affection, since the countenance was not flushed, nor the pupil dilated, nor was there even headach, and the patient was not plethoric.

Some observations were then made by Dr. Johnson, Dr. Webster, Mr. Greenwood, and others, relative to other forms of aphonia; the opinion appeared to be general, that when the symptoms, mentioned by Dr. Webster, were present, the plan of treatment recommended by him would be highly beneficial. Dr. Johnson remarked, that loss of power in the muscles, or the nerves, of the larynx, did not necessarily depend on cerebral congestion, but might arise from sympathy with other organs, and he thought such cases might be speedily cured by purgatives and tonics.

Dr. Webster, after a few preparatory remarks, then proceeded to make some observations on headachs. He stated, that on the present occasion he did not intend to embrace the whole subject of headachs, but confine himself to the consideration of two kinds; one affecting the forehead, called *megrin*, and generally dependent on a disordered condition of the stomach and liver; the other situated in the back part of the head, owing its cause, as he considered, to the colon or rectum.

When the forehead is the seat of pain the usual symptoms are, flushed countenance, throbbing or pain in the temples, foul tongue, and sickness, with loss of, or impaired, appetite; when the stomach is less affected, the appetite may be good, and the tongue clean. Accompanying these symptoms there is frequently giddiness, which may be considered as indicative of disordered liver. Giddiness is frequently the precursor of jaundice, and it is rather remarkable, that the treatment which relieves the liver, and restores its functions, will remove the giddiness.

The treatment of headach affecting the forehead should be directed to clear the stomach, and promote the secretion of the liver, at the same time leeches may be advantageously applied to the forehead and temples, and recourse may be had to a blister if necessary; when the back part of the head is affected, aloetic purgatives should be given, and enemata employed, and a blister to the nape of the neck, or a seton, may be useful. In either case strict attention to diet and regimen is necessary. In treating headach large cuppingers are frequently had recourse to by practitioners, but, unless there is great fulness and determination to the head, Dr. W. does not think it

advisable, and he has seen it often produce injury instead of benefit. Where the headaches were of an intermitting character, after proper regulation of the digestive organs, Dr. W. found quinine to be a most useful remedy.

Rather a desultory but prolonged conversation took place on this subject, of which we must be contented with giving the heads.

Dr. Johnson inquired of Dr. Webster if he could tell him what was the seat of pain in headach?

Dr. Webster considered the question a very difficult one to solve.

Mr. Horne alluded to some cases of diseased kidney which had been under his care, and in which there was an evident connexion between the renal disease and a continued headach, to which the patients were subject.

A gentleman, whose name we could not learn, stated that the headach, arising from intense mental application, and which was peculiar to literati, was best relieved by equalising the circulation, through the medium of the warm-bath.

Mr. Greenwood considered thickening of the cranium was not an unfrequent cause of periodical headach. He believed that it was sometimes difficult to form a diagnosis as to the origin of the disease, whether dependent on disorder of the stomach or of the head; but, perhaps, it would be best obtained from the treatment, as activity of the body, exertion of the mind, warm rooms, and stimulating food, would relieve headachs caused by disordered stomach, but aggravate those arising primarily from the head.

Dr. Johnson mentioned the case of a lady, a patient of his, in Sloane-street, who has been the subject of periodical browach for the last three months, which has continued in spite of every thing that has been tried. It arose in the first instance from mental agitation, from the death of a favourite daughter. It commenced regularly at 1 A.M. and continued without intermission until 6 A.M. The patient compared her pain to that resulting from the application of a red hot iron.

Dr. Leonard Stewart mentioned, that at one part of his life he was the subject of severe hemicrania for seven months, and nothing proved of any use until, by the advice of Mr. Abernethy, he took sarsaparilla, and he then got quite well.

Dr. Webster considered that pain of the back of the head might be fairly attributed to disorders of the large intestines, as he had seen it come on so long after the ingestion of food, that it must have passed into the colon, and also because those purgatives, which are considered to act especially on that part of the intestinal canal, prove most effectual in relieving the complaint.

Some further remarks were made on headachs following great hæmorrhages, consequent on the evolution of gas in the intestines, sympathetic of disease of the spinal cord, &c., after which the meeting adjourned. In the

course of the evening some observations were incidentally made, relative to the sensibility of the cerebral mass in health and disease.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

March, 1835.

HENRY EARLE, Esq., F.R.S., President, in the Chair.

After the preliminary business of the preceding meeting was settled, and the new President had thanked the members for the unexpected honour that had been conferred upon him, he expatiated at no inconsiderable length on the grant of a royal charter, recently conferred; and on casting his eyes around, and beholding the valuable records of medical literature, which, although they reminded him of the "handwriting of yore," nevertheless plainly foretold, that by the assistance of the members, and the gentlemen who attended as visitors, with their communications, which would tend to extend these valuable Transactions, the Transactions of the Medical Chirurgical Society, which contain a greater proportion of facts, their size considered (having now extended to twenty-three volumes), than any other medical transactions in the world, the Philosophical Transactions excepted, would continue to prosper, instead of a limited time, for ever. (*Applause.*)

The Secretary then proceeded to read a paper, entitled "Observations on the Functions of the Fœtal Kidney, by Robert Lee, M.D., F.R.S. The author commenced by observing that in the works of systematic writers on physiology little or no information is adduced respecting their functions prior to birth.

Dr. Lee, in the course of his very excellent and, it must be confessed, unique paper, brought forward various facts, which he considered to demonstrate that the fœtal kidneys, like the intestinal canal and thymus gland, are in a state of activity, and perform the functions allotted to each previous to birth.

It seems that our author was indebted to the conclusions which he has arrived at, to the following illustrative case. A fœtus of eight months, still-born, with both ureters impervious and the kidneys distended with urine; the left kidney contained four ounces and the right nine ounces of a fluid, which he submitted to Dr. Prout for analysis. The fluid was found to hold in solution both urea and uric acid. (*Some crystals of uric acid were exhibited.*) Hence Dr. Prout concluded that the fluid was most decidedly of an urinary nature, a fact, he observed, which had often before been suspected but never demonstrated.

Dr. Lee induced premature labour, the patient six months advanced, pelvis deformed, and obtained thirty-two ounces of pure

liquor amnii, in which neither Dr. Prout nor Dr. Bostock could detect urea or uric acid in its composition. This led our author to remark that it is probable that at this early period a small quantity only of urine is secreted, and passes from the bladder to mingle with the liquor amnii.

In further proof of the opinion that the kidneys secrete urine anterior to birth, the Dr. quoted a case of impervious urethra, from Mr. Howship's work on Diseases of the Urinary Organs, also a second case, which came under the observation of Sir B. C. Brodie, and two others, related by M. Billard, of malformation of the foetal kidneys and obliteration of the ureters.

Mr. H.'s preparation, and two drawings exhibiting an anterior and posterior view of it, well executed, were exhibited to the Society, and also the preparation that the Dr. obtained the history of his case from was shown, which gave rise to a long and very interesting discussion, such as we believe has not lately transpired among its members. The President, the author, Dr. Simms, Dr. Burne, Mr. Howship, Mr. Partridge, and Mr. Thompson, entered *con animazione*, into the subject.

LONDON MEDICAL SOCIETY.

Monday, March 16th, 1835.

DR. WHITING in the Chair.

Mr. Stephens presented to the Society specimens of some small urinary calculi, voided in prodigious numbers from a female patient, who, two years antecedently, had undergone the operation of extraction, and since which period she had suffered from incontinence of urine. Mr. Stephens considered the calculi uncommon, and worthy of the Society's notice, for, on examination, he thought the nuclei would prove to be hair, which was found to be correct as far as regarded those calculi which were imperfectly formed, but those that had assumed the shape and size of a pea, did not present that phenomenon. The discussion which ensued bore reference solely to the possibility of the hair being introduced artificially into the situation in which it became the nucleus of the stones.

Mr. Kingdon considered that its presence might be caused by the incessant friction to allay the immense irritation that must necessarily be constantly present, thereby causing their lodgment in the meatus urinarius.

Dr. Clutterbuck considered that the nuclei being formed of hair, originated from the urine involuntarily passing from the patient, and forming externally from the varied shape of the concretions; and suggested the propriety of eliciting more minutely, from the patient, facts bearing on this essential point.

Mr. Clifton could not agree with Mr. Kingdon as to the possibility of the hair becoming the nuclei while in the meatus urinarius, as

the constant stilloidism of urine that was going on would tend to their dislodgment; but would rather concur in the opinion given by the learned Doctor.

The President requested to know whether any members present had met with any cases that coincided with those he had related to the Society at a previous meeting, as a similar one had since occurred in his practice, where the whole cutaneous surface was so exquisitely sensible, that it could not bear the least impression made on it, without the patient evincing excruciating pain.

Mr. Kingdon remarked that he had lately met with a case which brought to his recollection the cases referred to by the President, where it would seem, if any assignable cause could be given, that it arose from the effect of exposure from a warm to a cold temperature, as the patient, an elderly gentleman, possessed a peculiarly sensitive constitution.

Mr. Kingdon afterwards narrated the case of a lady who had been married when very young by the desire of her parents (who were perfectly free from any cancerous diathesis) to a rich old gentleman. She died childless at the age of 40, of a malignant disease affecting both breasts, which at one period assumed the characters of genuine fungus hæmatodes, at another the tuberculous sarcoma of Abernethy. Prior to death they digressed, but manifested to an equal extent their malignant virulence. At the post mortem examination the muscular substance of the right side particularly was found almost entirely destroyed, there being scarcely any traces left of the pectoral or intercostal muscles. The ovaries were enlarged, and, together with the lumbar glands, were implicated in the morbid derangement.

Several members advanced various hypotheses for the rationale of the commencement and progress of the complaint, which it would avail but little to transcribe to our pages; but, without leaving the case thus abruptly, we, as honest and impartial journalists, would remind the members of the power of the sensorium, in a state of disease, producing baneful effects on the uterine system, where the functions of the latter have not been exercised through inability, as in the above case, causing disappointment and grief, frequently manifested during the life of the patient by the temper becoming peevish. Judging from the cases that have fallen under our notice, similarly affected, we have invariably found that the breasts became the seat of the disease where the uterine organs have not been brought into action; but, on the other hand, where the disease occurs after pregnancy, the matrix, and not the mammæ, is the part affected.

REMARKS ON THE CONSEQUENCES
OF PHLEGMASIA DOLENS, MORE
ESPECIALLY WITH REFERENCE TO
THE NERVES AND SPINAL MAR-
ROW.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,—Having in my last communication (inserted in No. 162, page 171, of your valuable Journal) attempted to point out the proximate and exciting causes of phlegmasia dolens, before quitting the subject, I think it my duty to allude briefly to a most disheartening train of symptoms that sometimes suddenly springs up after the phlegmasia has apparently subsided, and which I do not find that any writer has taken the least notice of; not that I conceive for a moment that the same termination of the disease has occurred only in my own practice, but probably, as ably remarked at a late meeting of the London Medical Society by its president, Mr. Kingdon, our attention having been attracted by any particular symptoms, we are on the *qui vive* for their very next appearance. The change I allude to is the following. The pain suddenly leaves the affected part of the extremity, and is experienced darting towards the pelvis, and as the inflammation (satisfactorily evident by the pain) rapidly extends up the spine, the nerves, along with the spinal marrow, become implicated. When the inflammation has extended to that portion of the cervical column, which gives off the phrenic nerve, the severity of the patient's sufferings is now principally confined to the thorax. Respiration becomes exceedingly oppressed and painful, with a distressing hacking cough, and palpitation threatening constant suffocation. The functions of the brain are more or less affected, according to the condition of the fever, whether inflammatory or typhoid.

With respect to the treatment, I am fearful it will be proved that our efforts will be seldom of much avail. Should it be considered expedient to reduce the system, it must be attempted with great caution, for after a very moderate venesection I have noticed, in two instances, sudden collapse ensue, in which state the patients have soon expired, without the slightest efforts on the part of the constitution to rally, although aided by powerful stimuli. Experience has now taught me to rely on opiates and diaphoretics, and abandon all thoughts of depletion.

From the symptoms we are led to expect, *a priori*, considerable mischief in the cavity of the thorax at the post mortem, but the reverse will be found the case. The lungs and heart, provided they were previously healthy, will now be found perfectly sound, (as is not unfrequently the case on opening children who

have died of hooping cough, or rather of its effects on the brain and spinal marrow; the cerebral and spinal excitement terminating in an effusion of serum producing convulsions and death).

In the two cases which proved suddenly fatal, and which were alluded to when offering a cautionary remark as to bleeding, the only detectible morbid appearance was ramollissement of the spinal and cerebral mass. No doubt the same condition had affected the nerves, although it could not be so clearly demonstrated.

I am, Gentlemen,
Your obedient and obliged servant,
J. H. HORNE, Surgeon.

5, Gerrard-street, Soho,
9th March, 1835.

HOSPITAL PECULATION.

To the Editors of the London Medical and
Surgical Journal.

GENTLEMEN,—I am one of those who, trusting to the good faith of implied engagements, paid some six months ago the sum of twenty-five guineas into the hands of one of the principal surgeons of St. Bartholomew's Hospital, for the privilege, as I then understood, of profiting by seeing the surgical practice of the hospital under his auspices. Being an ardent lover of my profession, I attended ticket in hand, and big with the hope of witnessing "sound chiro-surgical" instruction at the wards. But lo! what was my disappointment, when, instead of being the auditor of acute investigations into, and grave observations upon, the different cases, which I expected, I found myself, after waiting at one of the doors until 1, P. M., in the rear of some forty fellow students, following in double quick time the steps of our preceptor from bed to bed. Case after case disappeared, and no profound observation met my ear, nor could I indeed get a sight of the sick patient. No stop, no stay; on, on we steered, and only a few hardened pupils out of our regiment could keep up with our Mentor; these lucky ones rallied round him, and closed all access to the patient's bedside. As I came up in the rear with ears pricked to catch something, away scudded our preceptor, and I was obliged to give chase again, till breathless, and squeezed, and disappointed, I found my fondly cherished hope of instruction vanish day after day into thin air. Being of a hot temperament, I was hardy enough to propose to some fellow pupils to call a meeting for the purpose of remonstrating against this unseemly despatch of business, but got laughed at for my pains. I attended on operating days, got into the theatre one of the first, and congratulated myself upon a sort of victory over villainy. But behold! again there was no sight for me. A phalanx of dressers and other privileged specials occupied the floor surrounding the operating table, and although vociferously

called upon by myself and unlucky comrades to keep their heads out of the line of vision, they persisted in obstructing our view. What most of us got was the delectation of hearing the patient roar, seeing a knife brandished, a bloody sponge or two passed over head, and, finally, the sufferer carried off, shorn of one of his nether limbs; but no glimpse of the affair of separating it saluted my optics. After several unsuccessful attempts in this way, I was told, unless I became a dresser, at the additional expense of twenty-five guineas, I might despair of gratifying my desire for knowledge. To you, gentlemen, as the expositor of abuses, especially such as are calculated to damp the ardour, and injure the prospects, of a young aspirant in the profession, I have finally resolved to address myself, and respectfully trust you will, in some way or other, as seems best to you, notice my complaint.

I am, Gentlemen,

A DISAPPOINTED BARTHOLOMEW STUDENT.

THE

London Medical and Surgical Journal.

Saturday, March 21, 1835.

THE HOSPITALS AND THEIR REGULATIONS.

IN surveying those magnificent structures, which the philanthropy of Englishmen has caused to be erected for the restoration of health to the afflicted, a deep impression of the charitable feeling of the people is conveyed to the mind of the spectator. He contemplates with admiration the liberality which could part with so much wealth even for so estimable a purpose, and enters the hospital portals expecting to find the internal management and regulations, in every respect, correspondent to the external aspect.

At the first *coup d'œil* he meets no disappointment, his eye scans cleanliness, order, and comfort. Of course he blesses his stars that there exists so much philanthropy, so much unalloyed good in this world of evils. But let his inquiries be directed a little farther, let him, taking for granted that the neatness and order which meet his view are the effects of an excellent economy, be sufficiently curious

to examine into the more important machinery of the establishment, and his curiosity will be gratified at the expense of his former approbation,—leaving the demure-looking sisters, the clean aproned nurses, and burly porters on one side, let him take a review of the *corps d'élite*, the health officers who serve the institution. These he would find distributed into head surgeons, their assistants, and apothecary, house surgeons, and dressers. Let him, we say, take a review of this corps, and he would marvel that, within this apparent *terra firma* of charity, extortion and speculation flourished abundantly.

Such an inquirer would find, in the course of his investigation, that the head, or principal surgeons, received an enormous remuneration; not from the funds of the establishment, but in fees from students resorting to it for information. He would find the assistant-surgeons touching no reward in the aforesaid way, but waiting for their turn to do so in succession, as their Gamaliels became defunct, or retired from the field. He could not fail, nevertheless, to perceive that a certain harvest was reaped by them in the interim, owing to the prominent situations they held. The apothecary might perchance be in his shop and so escape scrutiny, but the house surgeon would be looking sharply after some hospital assistancy, or infirmary, and paying for standing on his elevation. Lastly, the dressers would pass in review; each in his own estimation a profound “chirurgical,” but *nevertheless* paying for his post. After these would follow a promiscuous phalanx paying for being the witnesses of the feats of all the former. All this would our inquirer behold, and he could not fail to feel surprise that, in the house of charity, *payment* in some way or another was the order of the day,—patients excepted, all

parties would be fingering cash, either in receipt or disbursement.

Looking at the amount of money collected from house surgeons, dressers, and forlorn-looking students (we speak of a large hospital), our friend would say, "Here is money enough to support this glorious establishment extracted out of the pockets of those who avail themselves of the advantages it presents for acquiring knowledge,—doubtless the pelf is appropriated to that laudable purpose." The rejoinder would be "No! two or three principal 'chirurgicals' pocket all, leaving their assistants the hope of doing the same at some future period." The inference he would draw from this exclusive dealing would be "either these head surgeons are men of indefatigable exertion, and almost supersede the necessity of their unpaid helpmates, or they are the foremost of the eminent, a sort of magicians in their art!" What beadle or porter in a hospital would not smile at this conclusion? Not because it bears any thing extravagant in itself, but because the misapplication of the funds in question has been so long continued, that what is unjust and monopolising on the face of it, has been rendered indistinct and obscure by the rubbing of long usage.

Disappointed at finding disinterestedness among the heads, the assistant surgeons receiving nothing, and chewing the cud of *hope*, would engage his attention, and probably his wonder at the eagerness with which men sought and contested for that office. He would say, "here are charitable gentlemen, active and good, struggling to be employed in what brings them no remuneration—men doing good for its own sake!" But as disappointment when begun is apt to recur, so would it here. The disinterested assistant would be found rioting on loaves and fishes,

which his attachment to a hospital procured him, by advancing his private practice.

Our inquirer would then demand, with a rueful face, what sacrifice of time and labour functionaries so well paid, both directly and indirectly, bestowed upon their studies? The answer, we opine, would yet lengthen his visage, "a very trifle, no more time or labour than is compatible with an extensive private practice; to which, indeed, they all bend their principal attention and energy. With a few solitary exceptions they deliver no clinical lectures, by which to enlighten their juniors, the *paying* students; nor visit the bedsides of the sick oftener than once a-day unless upon some great emergency." We now quit our friend to make a few observations.

Students, paying at the rate of 25 guineas each to the principal surgeon of a hospital for their instruction, are permitted to follow the heels of the latter through the different wards,—from 100 to 200 at least do this at a large hospital annually. It is plain, that so great a number cannot, as things are now conducted, derive much benefit from their *soi-disant* instructors in what is called hospital practice. For how can even a fourth part of the number of students witness the conduct, or hear the opinions of the surgeon, at the patient's bedside? Ten or twelve get close to him, surround the bed, and exclude the rest from perceiving what is going on. The celerity, too, with which the business of visiting the sick in hospitals is performed, adds to the pupils' difficulties. Now, the only mode in which the surgeon could repair this error, in receiving more than he can give a fair equivalent for, in the ward-hunting business, would be by delivering, daily, clinical lectures in the theatre of the school, where there would be

accommodation for all,—an hour at least, daily, should the surgeon lecture. But, as this is not done, and has not been done, it is clear, that the money they extract from the students for hospital practice is taken for nothing. In fact, in no other profession is the quackery of tuition carried to so great a height, nor the moral ties between teacher and pupil so scandalously violated on the part of the former. In no transaction, where obligations are purchased with money, does the fulfilment of the contract sit so loosely on the receiver of the money. Yet *these receivers* are, in our profession, the parties who lord it over the rest. *They*, one after another, fill the Council and Court of Examiners of our College of Surgeons. They are the men who *first* opposed the appointment of a Medical Committee in the House of Commons, and *now* will, after their defeat in that attempt, essay every stratagem in their power to crush the good its Report may produce when brought up. But if Medical Reformers stand together, if they hold themselves prepared to meet and discuss the means of emancipation when the proper moment arrives, the good cause shall triumph, and their wonder arise why they essayed not the victory before.

In the meantime to such as luxuriate in the almost sinecure offices of principal surgeons to our hospitals, we recommend that, for the sake of decency, they enlarge the scope of their usefulness to those who pay them so liberally; that they abolish the office of dresser, and permit, without an additional fee, every pupil in his turn to take the care of patients under their superintendence; that they deliver a clinical lecture on the cases under treatment, of one hour's duration each day—and thus endeavour to atone, as well they may, for charging the sum of twenty-five

guineas for attendance at the farce of walking, or rather running, after them through the hospital wards.

UNIVERSITY OF LONDON.

ON Tuesday, the 17th instant, Mr. Tooke, in his place in the House of Commons, moved for a copy of the charter of incorporation applied for by the University of London in 1831, and the steps that had since been taken with respect to it.

In answer to a question from Mr. Warburton, who wished to know whether the Hon. Member (Mr. T.) proposed in his bill to give the University of London the power of conferring medical degrees, as if he did so, he (Mr. W.), although a member of the council, was resolved to oppose it, Mr. Tooke stated, that understanding there was reason to suppose that a medical board would be constituted in London for the purpose of examining all candidates, and conferring degrees in the various branches of medicine and surgery, to which all the schools would be subject, he apprehended that the University of London would be recommended to agree to a restriction as to the power of conferring degrees in medicine as well as in divinity.

Mr. Roebuck stated that he would, on the part of the Dissenters of England, demand, that in case such a restriction was made with regard to the University of London, it should also be extended to the Universities of Oxford and Cambridge. The Dissenters had a right to perfect equality on the subject. He hoped, therefore, that his Hon. Friend would not withdraw that clause in his bill until there was a clear understanding that the other Universities would be placed on the same footing. The motion was agreed to.

**ON THE FILTHY SUPPLY OF WATER
TO THE METROPOLIS AND ITS DE-
LETERIOUS EFFECTS.**

Aqua, splendor vitæ !
Quando te bibam ?

SUCH may well be the exclamation of a resident in our metropolis, whose muddy beverage, after pursuing its lazy course through quagmire and bog, finds its way at last into his culinary utensils, an opaque or only semitransparent fluid, thence to be decanted into his stomach, vitiating its functions, and slowly but surely impairing the springs of life. The crystal stream seldom sparkles in his cup, unless drawn from one of those wells or pumps too rarely distributed in our dusty Babel to be of any general utility. Yet nothing can be plainer than that our very existence is intimately connected with the good or bad qualities of an element so constantly in requisition, and that to obtain it pure should be the especial care of a legislature provident of the health and comfort of the people.

Knowing this, does it not appear strange that, after geological proofs have been adduced of the existence of an ample supply of pure and limpid element at no great depth beneath our feet, the efforts of our speculators in it, should be directed either to bringing it to our doors from a distant part of the country, or to pumping it from that receptaculum of every nuisance—the Thames. Boring into the earth, and thus obtaining a never-failing supply has not yet, except in one or two instances, engaged their attention. Private individuals, it is true, who stood in need of better water for their purposes, such as brewers, have sunk shafts to furnish themselves with what the water companies could not : but the latter have neglected this source of providing for their customers.

If we look to the inhabitants of London, there can be no doubt that the quality of the water consumed by them influences their health in a great degree, and when such water is bad that it predisposes to various diseases. Turbid and stagnant pools, exposed to the continual accession of filth and noxious ingredients of every description, are bad reservoirs whence to draw this indispensable ally in our cooking and other operations. The New River, the Thames, and a few ugly-looking ponds in the neighbourhood of Hampstead are almost the only sources from which we draw our supplies. Neither of these is without objection. The New River runs a course of thirty-seven miles ; and, although there is good water at its Ware extremity, it degenerates during its meandering to such a degree, that at Pentonville it is scarcely a shade better than that of the Thames. Nor need we be surprised at this, when we see by the evidence before the Committee of the House of Commons, that it is the receiver-general of all the refuse of the villages by which it flows, and that it has been so for two hundred years ; add to this its slow motion, and that being insufficient in itself to supply the Company's tenants, a portion, estimated at one-third, is drawn from the Thames ; that, as it nears town, the daily bathing in it during the summer months of hundreds of dirty persons of every denomination,—tinkers, sweeps, &c.,—and then its savoury and refreshing character, we presume, must at once be appreciated. The River Lea, from the evidence of Messrs. Wicksteed and Steevens, engineers, is equally objectionable, and even more so, since it is navigated by barges and the Thames tide runs up it.

The ponds or miniature lakes at Hampstead are subject to like objections, with

this addition, that in dry seasons the amount of water supplied is not equal to the demand. This difficulty, however, the Water Company belonging to them has, by a spirited undertaking in the way of boring a well to the depth of above three hundred feet, in a great measure, obviated.

The Thames, last mentioned but not least in villainous quality, it is true, promises to afford an everlasting supply. But the objections which have been noted of the three former apply to it in a ten-fold degree;—drains, water-courses, and stinking ditches, with all their poisonous gases and decompositions, disgorge into and pollute it with all that is insalubrious and disgusting. It is said that the tide comes up and removes the impurities deposited; but we feel convinced, by ocular demonstration and by our gustatory organs, that it is not so. Most people coincide with us in this opinion.

Various schemes founded on as many theories have been suggested to remedy the nuisance alluded to, but all have involved an enormous expenditure of money, and therefore been abandoned. Different points of the Thames have been successively proposed as presenting advantages which afterwards proved fallacious. A company in embryo at the west end has offered to bring water from above Richmond; but it is not only *below* that village that the Thames becomes the depository of all that is vile and nauseous; even up as far as Windsor its qualities are but little better than in London, and the public health would still suffer. Besides, were the water pure at Richmond, it would in its course to town be liable, like the New River, to be deteriorated. Speculators, however, at all times awake, have suggested to meet this evil by forming a covered watercourse. This needs

but little reflection to be rejected; for whoever considers the swarms of vermin and aggregation of pestilent vapours engendered and condensed for want of exhalation in such a contrivance must without hesitation condemn it.

But the desideratum is *pure* water, not water *comparatively* pure. The question is not whether a phial of the fluid taken up at one point contains a few grains less of poisonous ingredients than that taken up at another, but whether it *can* or *cannot* be obtained uncontaminated with *any impurities*. Dr. Lamb, after elaborate analysis, has proved that the Thames water, *wherever* taken up, is full of noxious ingredients. The decision of place, then, upon that river is but one of more or less abomination. Such being the case, the west end speculators could confer no benefit on their customers by deriving their supply higher up our common provincial and metropolitan sewer, when even filtering beds have been tried and found inefficient.

And now, it appears that, although situated in the midst of water, we are in want of a good description of it. What remains but to seek a new source and dig for it? If the surface of the earth will not furnish it in perfection, owing to its exposure to the nuisances already mentioned, it will be wise in us to dive into its bowels, where it has been proved by experiment to exist. If successful in the search, and this admits not of a doubt, then would the fountain of this indispensable aliment spring up close to our homes instead of floundering through miles of uncleanness; and solid advantages, not to be appreciated at a superficial glance, would flow in upon us, and amply reward the toil and expense incurred. Indeed a speculation to bore a well, and erect a steam engine to pump

up its contents into a properly built and guarded reservoir, whence it might be distributed, in every parish, would pay well, and bring a profitable interest on the capital adventured.

It is now well known, that the stratum of clay on which London is situated, although extending to a great depth, has beneath it an inexhaustible source of fresh water, for, hitherto, the supply at one place proved only bounded by the size of the pipe; 100 gallons per minute have been obtained through a pipe of five inches' bore, and in some places a greater quantity. Taking this as a standard, a pipe of 72 inches' diameter would, of itself, afford a supply equal to the consumption of the metropolis, that quantity being calculated in excess, at 38,000,000 gallons per diem. This water, too, would be of a sweeter and better sort than any we obtain now. The success of the well at Hampstead shows that no fear of an insufficient quantity need be apprehended.

We have entered thus far into the subject, deeming it one of vital importance to the public welfare; and in these times, when novel epidemics have appeared among us, one demanding especial consideration. As medical journalists we are observant of whatever causes may produce pernicious effects upon the health of the community, and in adverting to, or commenting upon, them, discharge, in our humble opinion, a bounden duty.

Foreign Medicine.

Menstruation of a Young Woman through the Stomach—Symptomatic Hæmatosis.

A young woman, aged 24, spinster, menstruated at fourteen, the duration each time three days, quantity as ordinary, and this continued with regularity for two years. After that period, and without any assignable cause, the courses became by degrees less in quantity, appeared only once in two or three months, and were accompanied by heat, pain

in the stomach, cephalalgia, and general languor. Remedies of various sorts were tried, especially strong and frequent vomits, but to no purpose; inflammation in the abdomen then supervened, and was successfully combated by antiphlogistics; still the menses decreased in quantity and were retarded in time, and the following symptoms appeared:—extreme pain in the epigastric region, intense cephalalgia, dazzling of the eyes, tinkling in the ears, loss of speech, impossibility of extending the tongue; but memory and intelligence remained, as she afterwards described all she had felt, and every thing which had passed around her. These symptoms were more decided in character and of longer duration, if preceded by very scarce and very irregular menstruation: recourse was then had to bleeding in the arm, on the third trial of which they abated, and the use of speech returned; if, on the contrary, the menstruation lasted several hours, or one whole day, the second bleeding would suffice, but two were always necessary. In this state she continued for two years, was then sent to the Hôpital de la Charité, and attended by M. Fouquier, who, by suitable treatment, and the application of two leeches daily to the vulva, succeeded in restoring the menses to their due quantity and regularity, and herself to perfect health.

Three months subsequently, on being excessively affected by the death of her father, no other cause known, she was attacked by a sanguineous and abundant flow from the vagina, which sometimes lasted a whole month, never less than twenty days, and thus continued for the space of six months, reducing her to the last stage of emaciation and exhaustion. To stop the progress of the hæmorrhagia, the medical attendant administered blighted rye, chalybeate wine, carbonate of iron, sulphate of potass, with the freezing bath. Under this treatment the evacuation was suddenly suspended; but as the period of menstruation approached, the stomach became, and continued, painful to the touch; the abdomen enlarged, and to such a degree during the courses, as to have the appearance of the pregnant state; nausea, heartburn, and irregularity of digestion, accompanied these symptoms, and at length vomiting of blood, with excessive suffering to the stomach; these vomitings occurred once a day, sometimes oftener, but always lasted three days, the exact period of the menstrual discharge. On their cessation, the abdomen diminished to its usual size; local and general symptoms abated, but all returned with the ensuing monthly course, and such was her state, Feb. 3rd, when she entered the hospital.

She is a brunette, black haired, of meagre habit, and nervous sanguine temperament. The abdomen is very painful, especially on pressure; the stomach swelled, *se dessine* under the integuments, and renders a dull sound if struck; pulse small, and *concentis*;

tongue red, rather dry, and pointed. The discharge from the stomach, accompanied by all the usual symptoms and sufferings, returned on the 9th, and lasted through the 11th; the blood was clear, black, liquid, and without clots, rather less, however, in quantity than usual, as a portion of it passed through the intestines, tinging the feces therewith during the three days.

Treatment.—Sulphuric lemonade.

9th. The same, with twenty leeches to the stomach.

13th. Epigastric region always painful; fifteen leeches to the vulva.

14th. Pains in the stomach less violent, but greater heaviness in the head.—Foot-bath.

17th. Same state; gum-water; 15 leeches on the seat.

18th. Violent nervous palpitations during the night.—Antispasmodic drink; balm-water.

And thus the malady must continue its ordinary course until its progress can be checked by revulsions, leeches to the vulva, and every other medicament tending to direct the menses to their natural channel.

On the Employment of Extract of Pulverised Blue Aconitum in Rheumatic Affections.

BY DR. GINTRAC.

The use of blue aconitum has long been recommended in rheumatic and arthritic affections. Murray, in reporting the testimony of several physicians in favour of this medicament, adds his own personal experience of its beneficial effects. Yet the employment of blue aconitum was very limited, owing, doubtless, to the exaggerated praise too often bestowed on remedies which prove, in the end, of no avail, or perhaps to the natural fear of administering a plant reputed poisonous.

I myself was possessed with much doubt and fear on the matter, when I met with the Essays of M. Lombard, Physician to the Civil and Military Hospital at Geneva, on the Efficacy of the Extract of Pulverised Blue Aconitum in Acute Articular Rheumatism. The facts published by that gentleman appeared to me conclusive; they inspired me with confidence, and I resolved to verify them myself. Accordingly I engaged M. Loze to prepare for me a few drachms of the extract used by M. Lombard, which differs from the common, often found by that gentleman inert. It is thus prepared:—The juice of the plant, expressed and submitted to a gentle heat to coagulate the albumen, is evaporated in an alembic, dissolved again in alcohol, filtrated, and again evaporated in a low temperature. Some juice of the plant from the Pyrenees, mixed with a little mucilage to prevent irritation completed the prescribed operation.

The first patient on whom I made trial of the extract was a young man, 24 years of age, who for three years had been subject to rheumatic attacks, and was then suffering most acutely in almost all his joints. The suffering

parts were slightly tumefied, heated, and painful; there was complete vigilance. Neither general nor local bleeding gave much relief; twelve grains of prepared antimony in twelve ounces of water, administered by spoonfuls every two hours, caused at first a slight inclination to vomit. This subsided, and some degree of relief was manifested, of short duration however, and I would not repeat the dose. It was now that I tried the extract; but, not aware of its degree of activity, I gave at first but one grain divided into four pills; no effect; no excitation of the digestive organs—none on the nervous system; then pills of one grain each, gradually, and finally to the amount of eight pills per diem. The effect was complete; in the course of a few days every painful symptom disappeared, his recovery was perfect, and has so continued.

Miss * * *, about 22 years of age, had, in the winter of 1823, an obstinate rheumatic swelling in the right knee, which continued for two months, appeared in the following winter, and again during the last summer, with increased intensity. Bleeding, leeches, cataplasms, emollients, and vapour-baths, various liniments, blisters, revulsions on the digestive tube, sudorifics, and other means, were all employed, and to little purpose; the malady appeared to diminish, tired out as it were. In the autumn she could walk, or rather hobble along; the knee still swelled, leg and foot also, with great stiffness of the joints, and pain throughout the member. In vain were repose, the horizontal position, emollients, and a compressive bandage, tried; they, indeed, reduced the swelling a little, but increased the pain. It was at this period that I tried the extract; the result was prompt, successful, and unexpected. In the course of three days the pain and swelling subsided, the knee returned to its normal state, and she now walks with as much ease as she ever did. No indication of excitation in the digestive organs during the operation of the extract—none in the nervous system.

On a third individual I did not obtain so satisfactory a result. M. M——, 38 years of age, of a sanguine and nervous temperament, was attacked with acute rheumatism in all the articulations of the upper members, back of the head and neck, and thence proceeding to the lower members, accompanied by continued fever. After three bleedings, several applications of leeches, and the trial of antimony, acetate of ammonia, blisters &c., the extract was administered; at first with some advantage, then with none whatever, yet ten grains every four and twenty hours had by degrees been tried. No narcotic or even calming effect resulted; on the contrary, watchfulness with nervous agitation; this latter symptom must be attributed less to the extract than to the great irritability of the patient.

British Hospital Report.

WESTMINSTER HOSPITAL.

Fungus of the Testicle.

HENRY MAUNDY, æt. 25, of the leuco-phlegmatic temperament, a smith, residing at Foot's Cray, in Kent, was admitted into Mark's Ward, Sept. 11th, 1833, under Mr. White.

He says that he has never had either the venereal disease or gonorrhœa, and he attributes the complaint for which he has entered the hospital to a blow he received on the genitals, about three years since, from a wheel, on which he had just fixed a tire, and which he was in the act of raising, with the view of plunging it into the water-trough; he was struck by the part which was heated, but was protected from being burnt by the leathern apron he wore. The pain from the blow he describes as very severe, and lasting several minutes; it then went off, and he did not take any steps to prevent consequences. Tume-faction took place gradually, unattended with pain, and a month elapsed ere he underwent any treatment. He suffered then merely from the sensation of weight in the part; he was bled and had medicine, and the swelling disappeared. Eight months ago, he says he strained himself, and the testicles again began to swell slowly, and without pain; two months since, ulceration of the scrotum commenced, still without suffering, and a fungous growth protruded, which has continued to increase in size, but slowly. Both testicles are apparently affected; the scrotum on each side being ulcerated, but the fungus from the left organ is by far the larger; indeed, there is scarcely any on the right. The fungus is of a dirty-white colour, hard and insensible to the touch, rising, also, on the left, considerably above the level of the adjoining integuments. The scrotum is apparently unaffected except in the immediate neighbourhood of the disease; the cords are healthy.

His general health is unaffected. He has been married two years, but has not had any children. He considers that the generative process is properly performed, on his part at least; and says that he has proved his prowess that way so recently as three or four days previous to his admission.

Does not think that he has derived any advantage from the plan of treatment which has been pursued.

On the 14th he was brought into the theatre, and Mr. White laid open the scrotum on the left side, when he ascertained that the testis was sound. A tent was placed in the wound, and the man sent to bed. Very little irritation followed; but as the fungus continued to increase, the tincture of iodine was applied in the following manner:—strips of lint were applied freely all around to protect the scrotum

and testis, and a piece of lint, folded four times, was then soaked in the tincture, and laid on the fungus. This was at first done once a-day, afterwards twice, and, dating from the 14th of October, three times a-day. Under this treatment the fungus did not increase or diminish, but it became more vascular. It was applied only to the disease of the left side, the right having healed under simple applications.

On the 19th, no real benefit having been derived, he was again brought into the theatre, to have a ligature applied round the diseased parts, but as, on a closer examination, it was feared that the testis would also be enclosed, that intention was abandoned, and Mr. White contented himself with paring away the abnormal growth, until he came to a sensible and vascular part. In doing this, he made a hole or cavity in the centre of it, capable of holding the first phalanx of the index. The fungus, when cut, resembled the tunica albuginea testis in appearance. He was then sent to bed, and the iodine again applied, but without advantage.

On the 7th Nov., the fungus having again risen high above the surface, Mr. White made a minute examination to ascertain the condition of the testicle. On the right side, a body smaller than usual, but equable, and giving a sickening pain on pressure, could be felt. On the contrary, on the left side the testicle could not be felt, and even very great pressure did not cause pain. Mr. White, therefore, expressed his intention to cut down on the diseased structure and remove it. If the testicle was there he would avoid it, but he did not believe there was one. This intention was carried into execution on the 16th, Mr. Guthrie and Sir A. Carlisle having examined the man previously, and given the same opinion. The incision was made as for the operation of castration, carried to the inside of the fungus, and the testis could then be seen at the back and inner part, healthy, but smaller than usual. The fungous growth, therefore, only was removed, and with it that part of the scrotum which was involved in the disease. In order to remove the whole of the disease, it was necessary to shave close upon the cord, in doing which a small abscess was opened, and its parietes were cut away. The parts were then brought together with ligatures, and dressed with dry lint. The operation lasted twenty minutes, and evidently gave extreme pain.

The ligatures were removed on the 19th, and he was doing well; but in a few days some sloughing took place, and pus also collected at the lower part of the scrotum, requiring a counter-opening. The slough soon separated, and he was progressing fast towards a cure, when he became the subject of erysipelas, which affected the parts involved in the operation and the penis. This was combated by the usual means, and on the 31st of December he was dismissed cured.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, March 12th, 1835:—Pelham Aldrich, Stowmarket; William Cass, Liverpool; Esquire Dukes, London; George John Marris Wilson, Greenhithe, Kent; Joseph Chas. Skelton, Bromyard; Daniel Barker, Bransdale, Yorkshire; Lewis Redwood, Boverton, Glamorganshire.

The following are the Medical Estimates for the service of the Navy of the current year:—Provisions and stores of all kinds, including issues from the Naval and Victualling Depots for the several Naval Hospitals and Infirmarys, £16,000, less by £5000 than last year. Medicines, chemicals, and surgical instruments, £4500, more by £300. For the subsistence and cure of seamen in sick quarters and in temporary hospitals, and for other casual accommodation for the sick, and for miscellaneous disbursements for medical service, £2500, less by £500 than last year. The total estimates for this year are £23,000.

APPOINTMENTS.

Naval.—Mr. Alexander Nicol, surgeon, and Mr. James Steel, assistant-surgeon to the Jupiter. Mr. Daniel King, surgeon to the Rattlesnake, vice Magrath. Messrs. John Caldwell, Henry Baker, and William Rogers, assistant-surgeons to the Victory. Mr. H. Fossman, assistant-surgeon to the Alban. Mr. H. D. Shea, assistant-surgeon to the Swallow packet. Mr. J. Scott and Mr. Jack, assistant-surgeons to the San Josef. Mr. Ains with, surgeon and geologist, and Senor Riga, native of Constantinople, apothecary and third interpreter to the Euphrates. Dr. Staunton, Ryl. Artillery, physician and naturalist, and Mr. Staunton, chemist and assistant in natural history to the Tigris, both on the eastern expedition.

Military.—Assistant-Surgeon T. F. Cotton, from the 14th reg., is appointed surgeon of the 12th Foot, vice Orton, deceased. Staff-Assistant-Surgeon H. Drummond, M.D., has been appointed assistant surgeon of the 14th Foot, vice Cotton, promoted to the 12th Foot. Surgeon J. Wyer, from the 74th Foot, has been appointed surgeon to the 10th Foot, vice Waterson, who has received a commutation. Staff Assistant-Surgeon Edw. Hugh Blakeney has been appointed assistant-surgeon of the 67th reg. vice Cumming, promoted in the 74th Foot. Assistant-Surgeon Alexander Cumming, from the 67th Foot, to be surgeon of the 74th Foot, vice Wyer, appointed to the 19th Foot. Hospital Staff—Apothecary Joseph Schembri, from the half-pay, to be apothecary to the forces, vice George Middleton, placed upon half-pay.

General.—Surgeon C. J. O'Hara, Master of the Coombe Lying-In Hospital, Dublin. Dr. Maunsell, Professor of Midwifery at the Royal College of Surgeons, Dublin. Dr. W. R. Mesham, of Woburn, Physician to the General Infirmary, Belfast. Dr. John Abercrombie, First Physician to his Majesty for Scotland, Lord Rector of Marischal College, Aberdeen. Dr. John O'Connell, Medical Attendant to the Rathleague Dispensary, County Leitrim. Mr. Watkins, Surgeon to the Canton female emigrant ship to New South Wales. Dr. D. C. Macneight, of Queen Anne-street, Physician to the Marylebone General Dispensary, Whitebeck-street, Cavendish-square. Mr. Denne, Surgeon to the Kent and Canterbury Hospital.

Resignations.—Dr. Johnson, Professor of Midwifery in the Royal College of Surgeons, Ireland. M'Keever, Master of Coombe Lying-In Hospital, Dublin. Dr. Duncan, Dr. Wilson, and H. Purdon, Jun., Medical Attendants of the Belfast General Dispensary. Mr. —, House Surgeon to the Chichester Infirmary. Mr. Copeman, Apothecary to the Norfolk and Norwich Hospital.

DEATHS.

Mr. Shells, surgeon of the ship *Amelia* Thompson, at Flourat, East Indies. Dr. P. G. O'Connor, of Lauesborough, County Longford. Mr. Dixon, surgeon to the Horsemonger-Lane Gaol. Mr. James Paton, surgeon of the ship *Exmouth*, at Calcutta. In the East Indies, Mr. D. W. Taylor, of the Medical Department. At Newhaven, Scotland, Dr. F. B. Young, of Greensborough, Pennsylvania. Dr. Alexander Rarasay, of Dundee. Dr. Robert M'Grath, of Kilbaron, County Clare. At Montreal, Upper Canada, Mr. M. Mabey, Staff Surgeon to the Forces. Mr. Reginald Orton, surgeon of the 12th Foot. Mr. John Tucker, surgeon, of Bridport, and coroner of the West Division of Bridport. In Bath, Charles Kegan, Esq., formerly of the East India Comp.'s Bengal Medical Establishment. At Charleston, St. Nevis, Mr. Sam. Fitzherbert Bowden, formerly of Bristol, surgeon. Dr. Thomas Williams, of Guildford-street, Russel-square. Mr. J. Ackell, of Bath, surgeon. Dr. D. M. M'Gibbon, late surgeon of the 35th Foot.

WEEKLY BILL OF MORTALITY.

London, Tuesday, March 17th, 1835.

Abscess	4	Inflammation	35
Age and Debility	57	Inflammation of the	
Apoplexy	7	Bowels & Stomach	9
Asthma	17	Inflammation of the	
Childbirth	2	Brain	3
Consumption	64	Inflammation of the	
Convulsions	33	Lungs and Pleura	6
Croup	5	Liver, Diseased	5
Dentition, or Teeth-		Measles	6
ing	6	Miscarriage	1
Dropsy	18	Mortification	4
Dropsy on the Brain	17	Paralysis	5
Epilepsy	1	Small Pox	13
Erysipelas	2	Sore Throat & Quinsey	1
Fever	5	Thrush	1
Fever, Scarlet	8	Tumour	1
Gout	2	Unknown Causes	5
Hæmorrhage	1		
Heart, Diseased	1		
Hooping-Cough	16	Stillborn	25

Buried, Males 197 Females 192 Total 389
Increase in Burials reported this week, 68.

BOOKS RECEIVED.

A Synoptical Chart of the Diseases of the Ear. By J. H. CURTIS.

A reprint, on a smaller scale, of the chart formerly published by Mr. Curtis. It will prove of use to those for whom it is designed—the student and the junior practitioner.

LITERARY INTELLIGENCE.

In the press, *Martinet's Manual of Pathology*. Edited by JAMES QUAIN, M.D., Professor of Anatomy and Physiology in the University of London. A new edition, with numerous additions.

CORRESPONDENTS.

Akribes.—The objection is, futile: the society is properly designated the *London Medical Society*, in contra-distinction to the *Westminster Medical Society*. There is not any other association for which it can be mistaken, as all other medical societies in this metropolis are designated either from the name of some celebrated member of our profession, as the *Hunterian* and the *Harveian*, or they bear a more extended appellation, as the *Medical and Chirurgical Society*.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

THE

London Medical and Surgical Journal.

No. 165.

SATURDAY, MARCH 28, 1835.

VOL. VII.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of
1834-5.

LECTURE IV.

GENTLEMEN,—I have here the lungs of a patient who died yesterday in the Fever Ward, and to whose case I have frequently directed your attention. They present some pathological phenomena of considerable interest, and I would advise you to examine them carefully after lecture.

The patient, who was advanced in life and of a feeble constitution, had been ill for a week before his admission, with symptoms of dyspnoea, cough, and pain in the left side, which appeared shortly after his recovery from an attack of fever. On examining him the morning after his admission, we found the inferior part of the left lung dull on percussion, the dulness extending much higher up posteriorly than anteriorly. On applying the stethoscope we observed that, over a space about the size of two palms, no sound, morbid or otherwise, could be heard, but above the line which bounded this space there were *crepitating râles* and bronchial respiration. We had, therefore, a two-fold affection of the lung, pleuritis, as indicated by the pain in the side, dulness on percussion, and absence of all sound over a certain portion of the chest; and pneumonia, as indicated by cough and expectoration of viscid sputa, tinged with blood, dulness of sound on percussion, bronchial respiration, and *crepitating râles*. It is unnecessary for me to recapitulate all his symptoms, as I have, while visiting the wards, mentioned them in detail, and I shall merely state, that our examination showed that this man, in the first place, was labouring under pleuritis, and that it was of that kind which is called dry pleurisy, and where there is no tendency to considerable effusion; and, in the next place, that he had pneumonia of the inferior lobe of the left lung, extending up into the middle lobe posteriorly. You will recol-

lect, that, at the time of our examination, I marked on his skin with a pen the extent of the pleuritic inflammation as well as of the pneumonia, and you will find, by examining this lung, that my diagnosis was correct. You will observe the pleura presenting, over its inferior part, laterally and posteriorly, an effusion of lymph, with a very small quantity of sero-purulent fluid; and here is the seat of the pneumonia, which occupied precisely the portion I pointed out and no more.

With respect to treatment it was antiphlogistic, pushed as far as the advanced stage of the disease and the age and debility of the patient permitted. He was leeches and blistered, and this was immediately followed up by the use of calomel and opium, and the application of mercurial ointment over the affected portion of the chest. This treatment appeared to check the disease and stop the progress of disorganisation in the lung, at least it certainly arrested the pleuritis. The pulse became more tranquil, and what encouraged us to entertain some slight hopes was, that the difficulty of breathing subsided and respiration became less frequent, although it was never reduced to anything like the natural standard. I have already told you, that in studying acute and chronic affections of the chest the two chief symptoms to be attended to, are the number of respirations which occur in a minute, and the amount of dyspnoea complained of by the patient. Here, though the respirations sank from forty to thirty, still they were nearly double the natural frequency, and this, coupled with the age and debility of the patient, forbade us to hope for a cure. Though the pulse had become more tranquil, and the bloody expectoration had ceased, though dyspnoea was no longer complained of, and the frequency of respiration had become reduced, still the man's countenance exhibited strong marks of suffering and debility, and the stethoscope showed that the disease still continued, and there was no tendency to resolution in the affected lung. Here the stethoscope was of great value. A person, ignorant of its use, observing the tranquil state of the pulse, the diminution in the frequency of respiration and the cessation of dyspnoea, might be led to

believe that the man was getting better, and to pronounce that the period of convalescence was near. But the stethoscope told us that the hepatisation of the lung had no tendency to resolution, and when we observed, after a week, that it was still undiminished in extent, we were led to form an unfavourable prognosis. We knew that matters could not remain long in this state; we knew that the disorganised lung acted as an irritant tending to keep up disease, and that the man was every moment liable to a fresh attack of inflammation.

In the mean time the patient caught a fresh cold, from being exposed to the thorough air of our too well ventilated wards. This fell on his larynx, producing hoarseness, stridulous breathing, and copious expectoration. When an old person, reduced by some previous disease, catches cold and gets in consequence a sudden and remarkable hoarseness, so that he can only speak in whispers; when, in addition to this, he has cough, stridulous breathing, and copious muco-purulent expectoration, you may be sure that the case is a bad one, and the patient in the most imminent danger. Inflammation of the larynx in children is, you all know, a violent disease, it terminates in an effusion of lymph which, if not prevented, or remedied, by the most prompt and decided measures, too often produces fatal obstruction to the entrance of air and death from asphyxia. In the adult laryngitis does not, except in a very few instances, cause an effusion of lymph; still it is a severe disease, and well calculated to excite alarm. *In the aged* it is accompanied by considerable fever, and, what you would suppose likely to give relief, copious expectoration, evidently derived from the larynx itself,—and yet I do not recollect that I have ever seen a case of this kind that did not terminate fatally. I have very recently visited a case of this description, which occurred in the person of an eminent country practitioner, who had just come up to Dublin. He got an attack of cold, followed by hoarseness, which went on for two or three days without being attended to, until one evening he suddenly became alarmingly ill, and was obliged to send for his friend, Dr. Evanson, who prescribed and called on me the next day. I found him labouring under stridulous breathing, constant laryngeal cough, prostration of strength, and enormous muco-purulent expectoration. His pulse was very rapid, he complained much of oppression of the chest, and died the following night, more with symptoms of exhaustion than of asphyxia.

The symptoms of laryngitis, which arose thus suddenly in our patient, were quickly succeeded by others. On Saturday morning we found him much worse, his countenance was sunk and livid, and his breath had become extremely fœtid. His expectoration also exhibited a very remarkable change, it was greenish, ichorous, and had a most intolerable fœtor. He now began to manifest symptoms of awful prostration, his distress of respiration

became intense, his eyes fixed, his extremities cold, and he expired in about forty hours from the commencement of the attack.

Here, gentlemen, a man, after fever, gets an attack of pleuro-pneumonia, this is relieved to a certain extent by treatment, but the hepatisation remains unresolved. At the end of three weeks he gets an attack of laryngitis; in addition to this gangrene seizes on the diseased lung, and he sinks with great rapidity. Where gangrene attacks the limbs it may creep on slowly, and life may be prolonged for a considerable time, but when it fixes on internal organs its course is rapid, and generally proves fatal in a few days. In the lung, unless the patient's constitution is unimpaired and the disease limited, it will terminate quickly in death, and you have seen that, in this case, it only lasted from Saturday until Monday morning, that is to say about forty hours. After the acute stage of pneumonia had passed away, as denoted by the absence of fever and bloody sputa, and diminution of dyspnoea and frequency of respiration, the case assumes a chronic character, which continues for nearly a fortnight, and then a new order of symptoms appears, manifested by fœtid breath and expectoration, sudden prostration of strength, Hippocratic face, and cold extremities. Those who have watched this case must have been struck with these three remarkable stages, the first stage of inflammation, the succeeding one of chronic disease, and the termination in gangrene. It is not usual to find gangrene of the lung supervening on inflammation which is arrived at the chronic stage, it is most commonly the result of acute inflammation of an intense character, and comes on at a very early period of the disease.

How are we to account for this sudden superposition of gangrene? There was nothing in the nature of the pneumonic inflammation to dispose it to terminate in this way. It had lasted for three weeks, and had arrived at a stage in which inflammation very rarely assumes the gangrenous character. To what, then, are we to attribute it? Partly to the debility of the man's constitution, and partly to an erysipelatous tendency in the air, which is now very prevalent. Except there was something to dispose the lung to gangrenous disease, as an enfeebled habit and a vitiated quality of atmosphere, we could not, under the existing circumstances, have expected such a termination. That this view of the subject is correct, is shown by the simultaneous occurrence of gangrene in another part, which had not been previously diseased, or subject to inflammation, except shortly before the man's death,—I allude to the larynx. If you examine the larynx you will find the mucous membrane at the posterior surface, and where it invests the chordæ vocales, destroyed by gangrenous sloughing. You perceive, then, we had gangrene in the larynx and lung simultaneously. The gangrene of the lung was not therefore attributable to the occurrence of

local inflammation having a tendency to gangrene, but dependent upon a constitutional affection produced by debility and a vitiated state of atmosphere. If this man had chanced to get a wound on any part of his body, I have no doubt but that it would exhibit a gangrenous character, and, in the same way, if he happened to get inflammation of the bowels, it is most probable that this also would have ended in gangrene. I have frequently, in the advanced stage of fever, where the patient is much reduced, and where signs of a morbid condition of the fluids is present, seen gangrene occur simultaneously in various parts of the body. What I wish to impress on you is, that though the inflammation of the lung ended suddenly in gangrene, it was not in consequence of the inflammation having in itself any such tendency, but in consequence of a change produced in the man's constitution by atmospheric influence, and which was favoured by his advanced age and great debility.

The inference to be drawn from the sudden occurrence of gangrene in this case is, that it does not depend merely on violence of inflammation. At one time pathologists were inclined to believe that gangrene was invariably the result of excessive inflammation, or at least of inflammatory action disproportioned to the vitality of the parts attacked, and that it was possible to prevent any inflammation from ending in gangrene by prompt and active treatment. But there are certain states of the constitution which have a tendency to convert every form of inflammation into gangrene, and that wholly independent of the violence of the local inflammatory action. Thus a person reduced by fever, small-pox, or malignant scarlatina, becomes liable to be attacked with gangrene in various parts of the body from the slightest causes. In all parts which are exposed to any degree of pressure you will, under such circumstances, have gangrenous sores formed, and even in parts where no degree of pressure has been exercised sphacelus is not unfrequently produced, as we see in many cases of confluent small-pox, and in the mortification of the pudenda in female children, which sometimes occurs in bad measles. In such instances, gangrene is not preceded by symptoms of inflammatory action, and in the present case it is very probable that no inflammation of the lung, properly so called, preceded the gangrenous affection which terminated life.

Permit me now to direct your attention to the case of a man named T. Kelly, who lies in the upper fever ward, and has been under the care of Mr. Knott. He is at present labouring under an attack of pleuritis and pneumonia, each modifying the other, the pleuritis being here also of that nature which is, by contra-distinction, termed dry. A few particulars in this case demand our notice. In the first place, from looking at this man, and examining his pulse, you would never suppose that he was labouring under a formidable

disease. A careless observer, finding the pulse to be soft, regular, and only seventy-two in a minute, that respiration was tolerably free, and the skin cool, might here very easily overlook the true nature of the disease, and say this man has no fever, no inflammation of any internal organ. Yet a careful examination shows that the right lung and pleura are extensively engaged. In the next place, we find that the pleuro-pneumonia has attacked the upper part of the lung instead of the lower. Pneumonia has a great tendency to attack the lower and posterior parts of the lung; indeed so frequently do we meet it in this situation, that we look upon its occurrence in the upper part of the lung as a rare exception to a general rule. The third point connected with this case is, that though the patient is labouring under pleuritis and pneumonia, his blood does not exhibit the slightest symptom of being affected by this combination of violent inflammations. When drawn from the arm, it separated very imperfectly into crassamentum and serum, and there was no deposition of that buffy coat which has been so often noticed by our ancestors as occurring in pleuritis, and hence termed *crusta pleuritica*. Here, from observing that there was no formation of coagulum, no cupped or buffed appearance in the blood, and that the pulse was soft and regular, some persons would have argued that no inflammation was present; but how false and dangerous such a conclusion would be, any one may convince himself by making a careful stethoscopic examination. The fourth point (which was first observed by Mr. Knott) is, that there is a considerable disproportion in the size of the sides of the chest; the right side measuring better than two inches and a half more than the left. Now there must be some cause for this; and as the man has pleuritis on this side, it would be natural to infer that there is a considerable effusion of fluid in the cavity of the pleura, and that the dilatation of the side is produced by empyema. There are some circumstances, however, in this case which forbid us to adopt such a conclusion. In the first place, this great increase of size in one side of the chest would indicate a very considerable effusion. By empyema, I do not mean the effusion of a quantity of lymph, which does not push back the lung more than a line, but an effusion of fluids of various densities and in large quantity, exercising very considerable pressure on the lung, and pushing it back towards its root. There are two circumstances in this case which should be attended to; first, the man is a labourer, and in such persons the chest, measured across the pectoral muscles, is always found to be on the right side half an inch, and sometimes nearly an inch larger than it is on the left. This is accounted for by the increased development of the muscles of the right side from constant use. In the next place, we find that this man has not only pneumonia and pleuritis, but also a

tendency to superficial inflammation occupying the parietes and integuments of the chest, as indicated by a feeling of pain and soreness in various regions of that side, but particularly at the lower part, where the sound is clear on percussion. Now where the sound is clear on percussion you are aware that no effusion of fluid exists. The fact is, that in addition to pleuritis and pneumonia the man is labouring under pleurodynia with a tendency to inflammation in the superficial parts of the chest. Under these circumstances, we should not be surprised to find some œdema of the parts, and here we have a second cause for the greater measurement of the right side of the chest.

These are the only points connected with this case to which I shall advert at present, except to mention that the treatment was obviously indicated to be antiphlogistic. You might perhaps think that in treating this man it was a matter of indifference whether you had recourse to tartar emetic, either alone, or in combination with nitrate of potash, or to calomel and opium; but you may lay it down as a rule now firmly established, that in cases like this the mercurial plan answers much better than tartar emetic. After bleeding this man, then, we gave him mercury in such doses as to affect his system as rapidly as possible, and we followed up our general means of depletion by the application of leeches, *which in all inflammatory affections of the chest are indicated in proportion to the pain and tenderness of the chest complained of by the patient.* Indeed something similar must guide us in judging how far we are likely to procure relief, *in cases of inflammation of any internal organ, by means of the application of leeches to the surface over the organ affected.* No good is ever obtained by their application, unless tenderness or soreness on pressure be distinctly observable, and the relief obtained is always proportioned to the diminution of this tenderness where it existed. Where it does not exist, the application of leeches only leads to loss of time, we must employ other remedies in such cases.

There is another symptom in this case which might deceive you into the belief that empyema is present; the motions of the right side of the chest are much more limited than those of the left. When you look at him stripped, you perceive an obvious difference between the respiratory motions on each side; the motions of the unaffected are free, and much more extensive than those of the diseased side. Now, generally speaking, this is a symptom most commonly observed in empyema and a few other diseases. It may also exist where there is extensive hepatisation of one lung, for in proportion to the impossibility of air entering the diseased lung, will the motions of the corresponding side of the chest be diminished. How are we to account for it in this man's case? The pneumonia is not extensive enough to cause it, and we have

no evidence of the existence of any effusion into the pleural sac sufficient to explain it. The only way we can account for it is by recollecting that the man has pleurodynia, and as every attempt at dilating the chest gives him pain, he endeavours to controul its motions on that side as much as he possibly can. This is a fact well worthy of notice. It exhibits to us a beautiful provision of nature, which enables a person by an intense discharge of the respiratory function in one lung, to compensate himself for a limited and imperfect performance of it in that half of the chest where it is limited by pain, paralysis, or disorganisation.

As I am on the subject of pneumonia, it may be necessary to make a few remarks on some points connected with it, and first with respect to the expectoration. With the characters of true pneumonic sputa, I suppose you are sufficiently acquainted; you had many opportunities of examining the expectoration of the patient who died of gangrene of the lung at the time he was labouring under acute pneumonia, and while hepatisation was still going on. But I wish to observe, and I beg you will impress this on your minds, that *there may be cases of extensive pneumonia without any expectoration from the commencement of the disease to the period of complete resolution.* A case occurred in this hospital of a young woman, named Mary Nowlan, who had half one lung and the lower third of the other hepatised during a severe attack of pneumonia, and yet it was not accompanied at its commencement by expectoration; there was no expectoration during its continuance, and resolution went on and the lung was restored to its healthy condition without any expectoration. She remained in the hospital for two months, the lung being extensively engaged, and during this time she was carefully watched, but we never could discover anything like sputa from the beginning to the end of the disease. This is a very singular but instructive case. Another fact with regard to expectoration. A man may get an attack of pneumonia, and, in consequence of the rush of blood which accompanies the first access of inflammatory action in the lung, may have at the beginning some bloody expectoration; but after a day or two this subsides, and though the lung is extensively engaged, the patient may not have any expectoration whatever throughout the whole course of the disease up to the period of total resolution. I have seen this occurrence most distinctly marked in a case which I attended with Dr. Marsh. A gentleman who had got an attack of acute pneumonia, had bloody expectoration for the first and second day, but on the third, when I saw him, it had ceased, and all expectoration continued absent for five weeks, at the end of which he completely recovered. He was an intelligent and scientific man, knew well what was the matter with him, and entertained the old notion that all

inflammatory affections of the lungs resolve themselves by expectoration. Hence he looked day and night for its occurrence with considerable anxiety, but not the least sign of sputa appeared. In this case the hepatisation, which was very extensive, became completely resolved in the course of five weeks, and yet it is a singular fact that there was no expectoration whatever from the commencement of resolution to its termination. Hence you may perceive that in pneumonia the sputa may be absent from the beginning to the end of the disease, and that though the hepatisation may be very extensive, still resolution will occur without the slightest expectoration. Again, inflammation may attack a considerable portion of the lung and the patient may have bloody expectoration for the first two or three days, or during the stage of congestion; this may cease altogether, and the patient have no sign of sputa of any description up to the period of complete resolution. These are no doubt rare exceptions to the general law which regulates the course of pneumonic inflammation, in which we have sputa of one kind or other at every period of the disease; but they possess a considerable degree of interest, and it is of some importance to be acquainted with them.

Allow me to repeat here an observation I have already made. The lung becomes attacked by inflammation, this goes on to hepatisation, that is, a certain portion of the pulmonary tissue which had been before pervious, becomes impervious; instead of being a soft elastic crepitating sponge-like body, it becomes solid, inelastic, and very like that organ from which this condition derives its name, the liver. One of the most curious things, the knowledge of which we have arrived at by the discovery of the stethoscope is, that not only small, but even very extensive, portions of the lung may become thus solidified and altered in their texture, so that a return to the normal condition would seem almost impossible, and yet we know that a person may have nearly two-thirds of one lung reduced to this state of solidification, and still become afterwards as healthy as ever. Now if you read Laennec's admirable remarks on pneumonia, and other treatises on the same subject, you will find that the circumstances which indicate the resolution of pneumonia, are sputa of a certain character, and the reappearance of crepitus. I need not repeat here what I suppose you are all aware of, that crepitus commences before hepatisation, ceases on its appearance, and returns again when resolution takes place. The latter kind is what has been termed by Laennec *crepitus redux*. Nature accomplishes the resolution of pneumonia not only by absorption of those particles which the process of morbid action has deposited in the tissue of the lung, but by secretion into the air cells and minute bronchial tubes, and it is the presence of this secretion which gives rise to the crepitus redux. Now the observations which I have made with respect to the total absence of ex-

pectoration in some cases of pneumonia apply here also, for where all sputa are absent, where there is no expectoration from the beginning to the end of the disease, you can have no crepitus redux. This observation I have made in several cases. The fact which I wish to impress on your attention is, that in some cases of pneumonia expectoration may be completely absent; here the crepitus redux is never heard. Thus in the case of Mary Nowlan, resolution went on to the re-establishment of the healthy and normal condition of the lung, without the slightest crepitus being heard. The same thing has been observed in two or three cases by my friend Mr. Dwyer. It is not necessary for the resolution of hepatisation, that there should be increased excretion into the bronchial tubes, during the time nature is employed in absorbing the matter deposited in the lung. In the ordinary way it is removed partly by absorption and partly by excretion into the bronchial tubes. Sometimes, however, interstitial absorption alone seems to be sufficient for this purpose, and the cases I have mentioned prove that it is in the power of nature to remove the morbid product in this way, without calling in the aid of the bronchial tubes. I may, however, remark, that such cases are rare, and that resolution proceeds much more slowly than where free expectoration is present.

Before I conclude, I wish to make a few observations on a case of erysipelas which has recently occurred in our wards. Indeed we have had within the last two days three cases of erysipelas, the disease in two instances attacking patients who lay close to each other. Erysipelas is at present epidemic, and has been so for some time. Its character and mode of treatment have been well described by Mr. M'Dowel in a late paper, published in the *Dublin Medical and Chemical Journal*, which I would recommend you to peruse attentively. It has been observed by Dr. Cusack and others, that when erysipelas prevails as an epidemic we may expect puerperal fever, and scarlatina of a bad and dangerous type. Hence it would appear that the same noxious quality of atmosphere which generates one disease, may give additional malignity to others.

One of these cases of erysipelas occurred in the fever ward under peculiar circumstances. A young woman was admitted some time ago, labouring under spotted fever; she had been many days ill before her admission, and continued for a considerable time in an uncertain state. It is unnecessary for me to enter into any details regarding her treatment, but after the more obvious indications were answered, she was ordered to use the liquor chlorid. sodæ, and became convalescent, or *quam proxime* so. Her tongue began to clean, the abdomen was soft, the bowels natural, the skin cool, and the pulse about eighty. One evening she got fresh symptoms of fever, raved during the night, and next morning, when we visited the wards, we found her pulse accelerated, her

tongue dry, black in the centre, and dusky red at the edges and tip, and, in addition to this, she had some diarrhoea. The nostrils were filled with a semiconcrete mucus, exhaling a most offensive odour, in fact, one could hardly approach her bed without experiencing nausea from its extreme foetor. The inside of the nares was red and swollen, in short, erysipelas was seen occupying the nose, upper part of the face, and forehead. It had first attacked the skin and subcutaneous cellular tissue, producing considerable œdema, and from this it had extended to the mucous membrane of the nose. Erysipelas generally commences in the skin, but sometimes it has its origin in the mucous membrane.

I need not tell you that erysipelas of this œdematous character, accompanied by such a remarkable change in the secretion of the nostrils, and occurring in a person weakened by fever, was to be looked upon as a dangerous disease. I have not time to enter into any further observations on this subject, and will proceed at once to mention our plan of treatment. How did we treat this case? Not by the usual antiphlogistic means, for the patient was greatly debilitated. Bloodletting, leeching, emetics, and purgatives, were here out of the question; however valuable they may be in ordinary cases, we could not use them here without risking the patient's life. You might think that an emetic or a purgative could do very little harm, and might effect much good, but you are to recollect that the girl had nausea, thirst, bowel complaint, and great prostration of strength. What then was to be done? First we applied a blister to the nape of the neck, to act partly on the brain and prevent delirium, and partly on the erysipelatous inflammation of the nose and forehead. How blisters act in this case I do not exactly know, but you are all aware that a blister applied in the neighbourhood of a patch of this kind of œdematous erysipelas, is often followed by very good effects. Whether it is by exciting a new irritation, or by directing the current of the cutaneous circulation to another part, and causing a flow of serum thither, I cannot tell, but blisters certainly do give very considerable relief. So much for external means.

Now with respect to internal, the only one we could give here with any prospect of benefit was the sulphate of quinine. But the patient had nausea, thirst, and diarrhoea, and if you administer quinine by the mouth under such circumstances, you will do more harm than good. I therefore prescribed it in the form of enema, directing five grains of quinine, combined with four of tincture of opium, and two ounces of mucilage of starch, to be thrown up the rectum every fourth hour. Under this treatment the girl began to improve rapidly, the erysipelas faded away, the fever declined, and she is now once more convalescent. I also ordered her nostrils to be repeatedly syringed with warm water and vinegar.

Here, gentlemen, you perceive our treat-

ment has been successful in a case occurring under very unfavourable circumstances. It is a case the study of which will afford you some instruction, particularly if you compare its symptoms, progress, and treatment, with the case of erysipelas which occurred in the strong healthy girl who is lying near, and which we are at present treating on the emetico-cathartic plan.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCUCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXIV.

Dystocia.—Forceps.

GENTLEMEN,—Having completed the subject of eutocia in my last lecture, I now come to describe the various species of *dystocia*, or faulty labour; in doing which I must request you to recollect what I before told you respecting the precise meaning of this word; that it does not mean simply difficult labour, but labour which is faulty, which is incompatible with health. The arrangement which I shall follow is that of Professor Naegele, which is by far the best with which I am acquainted, and which he has still further simplified in a work recently published. He divides *dystocia* into two classes; the first consists of *labours difficult or impossible to be completed by the natural powers*; these may arise 1st, from malposition of the child; 2ndly, from faulty form and size of the child; 3rdly, from faulty state of the parts which belong to the child; 4thly, from a faulty state of the pelvis; 5thly, from a faulty condition of the soft passages; 6thly, from a faulty state of the expelling powers.

The second class consists of *labours which are dangerous for the mother or child, but where the course of labour is not interrupted*; this may depend 1st, on too rapid progress of labour; 2ndly, on prolapsus, &c. of the umbilical cord; or 3rdly, it may arise from other conditions and circumstances which render labour dangerous, as, for instance, convulsions, syncope, dyspnoea, severe and continued vomiting, hæmorrhage, &c.

On finding a want of proportion between the child's head and pelvis, and knowing how much it can be elongated by pressure, it would seem almost natural for a person to try and imitate the expulsive power of the uterus by inventing an instrument like the forceps, by means of which he could grasp the child's head, for they are in fact nothing more than a pair of artificial hands; why they were not

invented till the last century results from people not having been acquainted with the true mechanism of childbirth; if they had known the manner in which the head presents and passes through the pelvis, there is little doubt but that the forceps would have been invented long before; hence, in those times, nothing was used but perforators and sharp hooks for opening the head, or dismembering the child. Where the antero-posterior diameter is less than three inches the compression and elongation of the child's head will be useless, for in such cases a full grown child cannot be born alive; the forceps here are no longer applicable, and the perforator becomes necessary. The forceps consist in the application of a power to the head of the child without injury to it or the mother, it is the simplest of all inventions and the purest imitation of nature. I shall, therefore, speak of the forceps before describing the operation of turning, which is not so simple.

To describe the forceps of the present day in all their varieties would be a most unprofitable task, still, however, they are all formed more or less upon the same original type; they consist of two blades curved so as to fit the child's head, and acting upon each other as a mutual fulcrum at the point where they cross, which is called the lock, their lower extremities being formed into handles. The late Professor Fries, of Münster, supposing that those forceps would have the firmest hold, which coincided exactly to the shape of the head, and touched it in as many points as possible, made a pair of leaden ones, which he bent upon a child's head exactly to the form of it, and then had a pair of steel ones made from them. I know of no forceps which correspond so exactly to the shape of the elongated foetal head, immediately after birth, as those of the late Dr. Hopkins. The greatest distance between the blades should not be less than two and a half inches, because the head can never be compressed through a space narrower than the breadth of the basis cranii, which is two and a half inches.

In Germany, the extremities of the blades are not more than three or four lines asunder; in England they are somewhat more, some especially are very wide at this point: when each curved the blades have a firmer hold, because they act rather like blunt hooks, but their application is rendered much more difficult, whereas if they be too straight, although very easily applied, they require too much pressure to make them hold. The first forceps which were invented had the blades solid, but they were very soon made with fenestræ, which is a great improvement. The forceps of the late Professor Oslander, of Göttingen, are the only ones of modern times which are without fenestræ. Forceps, made with fenestræ, are lighter and hold better, and from allowing the most prominent parts of the skull to pass through, the blades occupy much less room. Until the year 1751 the forceps had

merely the head curvature, or, in other words, what is known by the name of the *straight forceps*; during this and the following year two of the greatest accoucheurs of the age, Levret and Smellie, described forceps which had not only the curvature for the head, but also one to correspond with that curve which is formed by the median line of the superior and inferior apertures of the pelvis. Although Levret published the description of his curved forceps in 1751, viz. a year before Smellie did, yet there is no reason to suppose that Smellie took the idea from Levret, because both had used these curved forceps for some years before they communicated their discovery to the public. Levret certainly possessed them as early as 1747, although not made known till 1751. On the other hand, Smellie expressly mentions that he had contrived these curved forceps "several years ago;" hence, although Dr. Smellie has an equal right to the merit of the invention, there is every reason to suppose that the claim of priority is due to M. Levret. The forceps of these two distinguished men have become as it were the national forceps of their respective countries, those of Smellie being known by the name of the English, those of M. Levret by the name of the French forceps.

After this era in the history of the forceps they received an additional curve by Dr. Johnson in 1769, author of a valuable work on midwifery; besides the head and pelvic curvatures he has made another in the shank of the forceps, with the intention of thus preventing the perinaeum from being too much pressed upon, in other respects they resembled those of his teacher, Dr. Smellie. Since which, new forceps (as they have been called) have been invented without end; in fact, almost every practitioner has considered himself bound to make some little addition or alteration, and has then called them *his* forceps, but they have all been more or less on the same principle as the original ones of Dr. Smellie. I could enumerate some few however which are very peculiar, and for this reason ought to be well known to every accoucheur, such as those of Chapman, Leake, Orme, and Aitken; but for a more detailed account I must refer you to a paper on the History of the Forceps, which I published in the Medical Gazette for January 8, 1831, or to Mulder's *Historia Forcipum*.

The chief points of difference between the English and French forceps are in their handles and lock: the English forceps have the ends set into wood or ivory handles, which have round knob-like extremities for the purpose of giving a firmer hold, as also for tying them together when applied, this however is seldom done; the forceps of Levret terminate in blunt hooks, with the intention that the practitioner should use them as such, where the blunt hook is required, but they can scarcely ever be used for this purpose, and are both awkward and useless. The locks of these two forceps differ as materially as their handles;

in the English forceps the shanks of the blades mutually fit into each other, by means of a deep groove, whereas in the French the blades are joined by a common screw pivot; both have their peculiar advantages, but I know of only one lock which *combines* the advantages of both; the two peculiarities of a good lock are a firm hold and the power of locking and unlocking with perfect facility. As far as respects a firm hold, the common pivot, as used by Levret, answers this object completely, but the difficulty of locking is very great, and the separating the blade is both awkward and inconvenient. On the other hand, the English lock allows us to connect and separate the blades with the utmost readiness and facility, but it does not possess the firmness of a pivot, and is therefore more apt to slip than the other. The lock which I here show you combines the advantages both of the French and English lock, and has, in my opinion, a considerable superiority over either; it was invented by Brüninghausen, of Würzburg. The forceps are designed only for the head of a full grown fœtus, not for a head which exceeds the usual dimensions, as in congenital hydrocephalus, and as a general rule they ought not to be applied as long as the head is above the superior aperture of the pelvis.

The directions for applying the forceps, which have been given by the English authors on this subject, refer solely to where the head occupies the cavity of the pelvis. Mr. Burns says, that the cranial bones should be touching the perinæum. Dr. Hamilton goes even further, and says that the head should be "so far advanced that the soft parts of the woman begin to protrude." There are, however, cases where the chief bulk of the head has not passed the brim, and where, from its large size or a slight contraction of the pelvis, the pains, although active, are not sufficient to press it through. We are not justified in perforating here, and under such circumstances, where the os uteri is dilated, I consider the forceps a much better and safer means of terminating such a labour than the ergot of rye.

The forceps act, 1st, *trahendo ope tractionis*; this is their most important action; 2ndly, when the head is fixed tightly in the pelvis they act as a lever from side to side, exactly as we wriggle a nail out of a piece of wood; 3rdly, they act by compression. From being applied in the transverse or rather somewhat in the oblique diameter of the pelvis, we might suppose naturally that the head would swell out in the contrary direction, which would only increase the tightness with which it is impacted in the pelvis, especially where the antero-posterior diameter is somewhat shorter than usual; this, however, is not the case, for the bones of the head ride over each other, and since the pelvis does not allow the head to swell out in the direction of the antero-posterior diameter, it becomes considerably elongated. From this power, which the child's

head possesses of lengthening itself, we should never be too ready or officious in the use of instruments, for by allowing the head sufficient time it will gradually mould itself to the shape of the passages, and pass by the natural efforts. "No one who has not seen it," says Mr. Burns, "could believe how much the bones of the cranium will overlap each other in a tedious labour; by this means the power of the uterus is very often sufficient to expel a child through a very small pelvis. This needless application of instruments may be excused in some on the supposition of ignorance, while others, from reasonings and principles, may believe it to be proper, but there are others sufficiently unprincipled to have recourse to the forceps or lever whenever the woman is not delivered within a certain number of hours after they are called."

The general indications for the use of the forceps are two,—1st, they are indicated in all labours which are difficult or impossible to complete, either from deficiency in the expelling powers, or from disproportion between the head and pelvis, or from the arm coming down with the head; 2ndly, they are indicated by circumstances or accidental causes, which render labour dangerous for mother or child, and where the danger can only be removed by hastening labour; for instance, in cases of hæmorrhage, convulsions, syncope, great debility, faulty condition of the respiratory organs, danger of suffocation, obstinate vomiting, unusually severe pains in nervous irritable habits, hæmorrhoids which have burst, hernia, retention of urine, congestion of blood to the head, prolapsus of the cord (in certain cases), inflammation of the uterus, &c*.

Baudelocque was indeed right when he said that the forceps were the most useful instrument which had ever been invented. Before proceeding to describe to you the operation of applying the forceps, I will give you a short sketch of their history, because the one is intimately connected with the other; it is not only a source of much useful information, but I think will also prove both interesting and amusing to you. There is no reason to suppose that the ancients were acquainted with instruments which enabled them to extract the head without injury to the child's life. Avicenna, it is true, when speaking of labour being rendered difficult from the size of the child's head, says that if it will not come by the usual means, the forceps must be applied. The question is, what species of instrument these were, and unfortunately the passage in which he refers to them is so short, that it is impossible to form any very correct idea. Albucasis, who lived about the same time, was in the habit of using several species of instruments, of which he has not only furnished us with descriptions but also drawings. Among these we find two species of forceps, the small one called

* Naegele, MS. Lectures.

misdach, the larger one called *almisdach*; they are furnished with teeth, and although they might have served very well to extract the child's head, still its life must always have been sacrificed.

In 1665, an English physician, named Hugh Chamberlen, declared that he possessed the means of delivering a woman without injury to herself or child, in cases where Mauriceau and other celebrated practitioners of that time would be under the necessity of extracting the fœtus by the perforator and sharp hooks; this he took care to make known in the various journals of the day, but kept his discovery a profound secret. Five years afterwards, being implicated in the rebellion in favour of King James II., to whose party he belonged, Dr. Chamberlen was obliged with others to fly the country; he accordingly went to Paris, and began to practise midwifery there. Not having been able to sell his secret in England, he tried the same plan in Paris, and offered it to Louis XIV., for a sum of not less than 1,500*l.* of our present money. For those times this was an enormous sum, and the king was unwilling to give it until he could be certain that the secret was really worth what Chamberlen demanded for it. It chanced at this time that a female fell in labour (*not* at the *Hôtel Dieu*, as Osiander says), whom Mauriceau was unable to deliver; this Chamberlen heard of, and, glad of the opportunity which now presented itself of proving the efficacy of his secret, requested permission to deliver her. I have translated the original case which Mauriceau took at the time, for the particulars of it are very curious, and in some degree show what sort of instrument Chamberlen made use of.

"August 19, 1670, I was called," says Mauriceau, "to see a very diminutive sized female, æt. 38, who had been in labour with her first child for eight days; the waters had escaped on the first day of her feeling poorly, and there was scarcely any dilatation of the os uteri. Things having remained in this condition till the fourth day, my opinion was requested by the midwife, and I advised that she should be bled, and if the result were not sufficiently favourable to justify the expectation of a speedy delivery, I directed that she should take ʒij. of senna infused in water to excite pains which had ceased altogether; this was done the day after, and succeeded in recalling her pains, which dilated the os uteri to its full extent. In spite of all this her labour made no progress, and the child, which presented with the head, remained in the same situation, without being able to enter the passages, which in this woman (who was very diminutive) were so exceedingly narrow, and the bones, which formed it, so compact and so close to each other, and the sacrum curved so strongly inwards, that the day after, when I was called to her assistance, I found it quite impossible to introduce my hand for the pur-

pose of delivering her, although it is a small one, so that, having tried to no purpose, I found it impossible to effect my object, not being able to introduce my hand without considerable force, on account of the narrowness of the bones which form the passage, and, having introduced it, it was so squeezed that I could only move the fingers, nor could I pass it far enough up, so as to introduce the crotchet with safety, and thus extract the child, which to all appearance had been dead for the last four days. Such being the case, I informed the assistants that it was impossible to deliver her, and being themselves convinced of it, they entreated me to extract the child by the Cæsarean operation. This I was unwilling to do, being well aware that death would be the certain result. Shortly after I had left her in this state, without the possibility of giving her any assistance, which I could have done in other cases where there was not such deformity, there came an English practitioner, named Chamberlen, who was at that time in Paris, and who, from father to son, had practised midwifery in London, where he had acquired the highest reputation in this art. Seeing this woman in the state which I have just mentioned, and being informed that I had found it impossible to deliver her, professed to be astonished that I, whom he considered the most able man in the profession at Paris, should not have been able to succeed; nevertheless he promised to deliver her in less than a *demi quart d'heure*, in spite of any difficulties he might meet with. He accordingly set to work, but instead of being a *demi quart d'heure*, he continued for more than three whole hours without ever leaving off to take breath. But having exhausted his strength and resources to no purpose, and finding that the poor woman would probably expire under his hands, he was forced to give it up, and own that it was impossible to deliver her, as I had already asserted. The unfortunate patient died in twenty-four hours after, having suffered the greatest possible violence; and on opening her body after death, and making the Cæsarean section, which I had been so unwilling to perform during her life, I found the child and every thing else situated exactly as I had previously said, and the uterus entirely lacerated, and in many places perforated, by the instruments which this physician had blindly used without the guidance of his hand, which, being as big again as mine, he could not have introduced sufficiently far to preserve the parts uninjured. Nevertheless he had come from England to Paris six months ago, in the hopes of making his fortune, giving out that he was possessed of a secret peculiarly for labours of this sort, and boasting that he could deliver the most hopeless cases in less than a *demi quart d'heure*. He had actually offered his pretended secret to the king's first physician for the consideration of ten thousand crowns, but the result of this unfortunate labour gave him such a distaste to

this country, that he set off for England a few days after, having found that there were men in the art more able than himself. Before setting off for London he called upon me, to compliment me for this work on midwifery, which I had published about two years before, and to inform me that he had never found the operation so difficult as in this case where he had not succeeded, praising me for not having so rashly undertaken what he had done. I received his compliments as I ought, letting him understand that he had been under a great mistake in thinking that it was as easy to deliver women at Paris as he had found it in London. He left for London the next day, taking with him a copy of my work, which he translated and published in 1672, by the translation of which he acquired such a reputation in midwifery that he amassed a fortune of more than 30,000*l.*, which he now possesses, as I have been told by many people who know him, &c."

In the preface to his translation you will find that Chamberlen mentions being possessed of this secret, but excuses himself from divulging it, because he should injure his father and two brothers, who were also in possession of it. He does not speak over favourably of Mauriceau, although he ought to have felt obliged to him, for this translation turned out an exceedingly lucrative publication.

On account of his political principles, he was again compelled to quit this country, and crossing over to Holland, where his fame as an accoucheur had already gone before him, he settled at Amsterdam, where he quickly formed a most extensive practice. He at last succeeded in selling his secret to three Dutch physicians, Cornelius Bokelman, Roger Roonhuysen, and the celebrated anatomist Frederick Ruysch, for a considerable sum, and on the condition that they never divulged it. They therefore continued to practise much in the same way as Chamberlen had done, first fixing the price and then shutting themselves up with the patient, whom they had sworn to secrecy, nor did they seem to be behind him in being determined to make the most of their secret, for they frequently pretended that it was necessary to be employed, where it was not at all required, merely for the purpose of extorting an additional sum from their patient, and were often guilty of the greatest abuse of it. They sold the secret for extraordinary sums of money, frequently making as one of the conditions, that they should receive half the profits, but always under a solemn oath of secrecy.

In the beginning of last century, a professor of anatomy at Ghent, in Flanders, named John Palfyn, a physician of considerable merit, conceiving that he should render his fellow-creatures a great service by discovering this secret and making it known, travelled into Holland with the intention of finding out what it was, if by any means possible. In spite of his most diligent inquiries, it was kept with such secrecy that he was unable to obtain even the smallest

information about it. Being unsuccessful in Holland, but determined to leave no stone unturned by which he might come at the truth, he passed over into England, and, at last, although he had not succeeded in obtaining a sight of it, yet, from the result of his extensive inquiries, he fancied that he had formed a tolerably correct idea of it, and made two blades like a pair of spoons or hollow hands, and called them his artificial hands. He tried them on the dead body and they succeeded. Contrary to the mean practice of Chamberlen and the Dutch physicians, he immediately took his discovery to Paris, whither he was going for the purpose of publishing his work on anatomy, and presented it to the Academy.

This was one, although not the earliest, origin of the French and English forceps. It is not improbable that Palfyn was considerably assisted in his idea of the forceps by a blunt hook which Mauriceau was in the habit of using to extract the head, in cases where it had been separated from the body and left in the uterus, merely with the difference that instead of pressing his fingers against the opposite side of the head, as Mauriceau did, he used a second blade, similar to the first, for that purpose. These blades did not cross each other, as the present forceps do, but their handles were either held one in each hand, or merely brought together and then tied. Moreover, when we consider that Palfyn had published an anatomical description of the female organs of generation, with plates, in 1708, which was intended as a continuation to Mauriceau's work, there can be hardly any doubt but that the knowledge of Mauriceau's blunt hook must have assisted him considerably in the discovery of his *tire tête*, as it was then called. Palfyn's instrument was somewhat changed by the celebrated surgeon Heister, but Petit was the first who described a pair of forceps, the blades of which crossed and were united by a pivot. These, again, were improved by Dusée, and communicated by him to Dr. Alexander Butler, of Edinburgh, who published them in the *Medical Essays and Observations*, 1733. The blades of these instruments, however, were solid; still although nothing else had been used in Paris but them, forceps with fenestræ had already been used in England. Dr. Johnson, in his *System of Midwifery* (1769), says, "I have a pair of forceps which did belong to a Mr. Drinkwater (late surgeon and man-midwife at Brentford) who began to practise in 1668, and died in 1728. The form and size of this pair agree with those of Chapman and Giffard, save only that the hooks of the handles are turned outwards." Whether Drinkwater obtained his forceps from the Chamberlens or invented them himself, it is difficult to say; certain it is, that Giffard had used his extractor, which so resembles these forceps, two years before Drinkwater's death. Chapman improved this instrument considerably, and thus it came into the hands of Dr. Smellie. According to him, these forceps were

adopted by the French, and were known in Paris by the name of Chapman's forceps, and when we come to examine Gregoire's forceps, which are the straight ones of his pupil Levret, we find them almost exactly similar to those of Chapman. On what authority Dr. Smellie asserts that they were originally used by the Chamberlens, I know not.

Let us now, gentlemen, return to Holland, and learn the fate of Chamberlen's secret. As Roonhuysen and his family had enjoyed the greatest practice in Amsterdam, it was generally called the Roonhuysen secret; it was known only to those who had paid a very heavy sum for being made acquainted with it, and this was always under a strict oath of secrecy. Thus for more than half a century had the Dutch practitioners the meanness and cruelty to keep it entirely in their own hands. At last it became such a necessary acquirement for those who practised midwifery, that on Jan. 31, 1746, a law was passed that no person should be deemed fit to practise midwifery in Amsterdam, who was not duly acquainted with the Roonhuysen secret. This was only to be obtained at a considerable expense, and now that this new law existed, the professors (who were all members of the Apothecaries' Guild or Corporation) were enabled to fix just what price they liked. At this time a practitioner named Rathlauw settled at Amsterdam and passed his examinations before the medical college; no fault could be found, but they objected to him on the score of his not being possessed of the Roonhuysen secret, which he either did not choose, or could not afford, to purchase. To obviate this, his friend, Cornelius Hendrik Velsen, of the Hague, sent him, in 1747, an instrument which he had received from Van der Swamm, a pupil of Roonhuysen. Rathlauw published a drawing and description of it, upon which the accoucheurs of Amsterdam, viz. Bökelman, a son or grandson of the original purchaser, and four others who were in possession of the secret, declared that he had not the real secret of Roonhuysen, but merely a speculum uteri, which was a useless and dangerous instrument. Rathlauw, however, answered and silenced them. It was in 1753 that two Dutch physicians, Jacob de Visscher and Hugo Van de Poll, actuated by the benevolent motive of making this important secret generally known, after considerable expense and trouble, succeeded in purchasing what was generally said to be the Roonhuysen secret, of Gertrude de Bruin, the daughter of a deceased practitioner, who had been known to have received it from Roonhuysen himself; it proved to be this flat iron, slightly curved at the extremities, which I now show you, and which has been commonly, although, in my opinion, erroneously, called the Roonhuysen lever. It is a remarkable fact, that wherever the secret has been described as in Roonhuysen's possession, it has been always mentioned as a double instrument, nor have we any proof whatever that Roon-

huysen ever used a lever of this sort. From the best authorities extant, the lever seems to have been invented some time afterwards, for there is every reason to know that the flat bar of iron which is before you, was invented by Plaatman, who, together with the above mentioned de Bruin, purchased the secret of Roonhuysen. The subject is highly interesting, and you will do well, at a leisure hour, to peruse two short papers upon this subject which I published in the *Medical Gazette* for Jan. 8, 1831, and in the *Edinburgh Medical and Surgical Journal*, for October, 1833. In the latter you will also find a description and delineation of the instruments which were found at Woodham Mortimer Hall, in Essex, a house which once belonged to the Chamberlen family. It is impossible for me, gentlemen, to enter into all these particulars during a lecture, because our time will not permit. You will find in the other paper, which was published in the *Gazette*, how Chapman's forceps, having undergone certain alterations, became those of Smellie, who also added the pelvic curvature, and that thus they have come down into our hands. So secret had the Dutch practitioners kept the knowledge of these instruments, that even in 1725 Smellie did not know of the forceps. Some authors even doubted whether Chamberlen did use an iron instrument of this sort; thus Exton, in his work on midwifery which was published in 1751, considers that it must have been some easy method of turning, and Groenwelt, who afterwards settled in England under the name of Greenfield, in his essay, "De tuto Cantharidum Usu, &c." supposes that it was a species of speculum uteri.

In Germany the forceps were not generally known until about 1760, when they were introduced into general use by G. W. Stein, one of the most distinguished pupils of Levret. Hence the German schools of midwifery were little more than a translation of the French schools, and continued so with little change until 1789, when the celebrated Boer of Vienna became one of the first converts to the use of the English forceps. In Copenhagen the forceps seem to have been used at a much earlier period; an accoucheur, named Bing, had used forceps some years before 1750, at which time a description of them was published by Johann Gottfried Jancké; they are the straight forceps without fenestræ, connected by means of a screw pivot, the handles forming blunt hooks, but the chief peculiarity in them is that by means of a very simple contrivance the handles can be separated from the blades, for the greater convenience of application and of carrying in the pocket; it is much superior to a similar invention of modern times.

The forceps of Matthias Saxtorph, of Copenhagen, so well known for his celebrated inaugural essay on the Mechanism of Childbirth, in 1771, had handles somewhat similar to those of Bing, only instead of taking off they folded back by means of a hinge; this species of

handle has been since used by Professor Hamilton of Edinburgh. In other respect Saxtorph's forceps resembled those of Smellie, both in the blades, lock, and handles, except that the whole instrument was upon a larger scale.

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**CASE OF FISTULA IN PERINÆO OF
LONG STANDING TREATED BY THE
ACTUAL CAUTERY, WITH SUCCESS.**

BY A. C. HUTCHINSON, ESQ., F.R.S.

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It is with pleasure that we insert the following interesting case, coming from such an able surgeon as Mr. A. C. Hutchinson. We may also remark, that we witnessed the case in question, and have of late seen the individual, who is, at the present time, in the enjoyment of excellent health.—EDS.

Early in December, says this gentleman, my neighbour, Mr. Devonald, called me in to the case of James Wilson, aged forty-nine, residing at 29, Wells-street, Oxford-street, who had laboured under fistula in perinæo for about fifteen years; and during the last twelve months was wholly confined to his bed. He had not passed any urine through the natural meatus for upwards of one year; and, to relieve himself, had been under the necessity of sitting upon a convenience for the greater number of these years, until he had become bed-ridden; and I can never forget the smell that met me when the room-door in which he lay was opened—no stable was half so bad. We found him lying upon a rotten mattress soaking in his own urine, which was unconsciously dripping through *thirteen or fourteen* fistulous openings in the perinæum round the anus, through various parts of the scrotum, and two were situated as high as the pubes above the dorsum of the penis, one on each side; while a basin was on the floor immediately under him for the reception of the urine that filtered through the bed. The case, indeed, seemed hopeless, but, notwithstanding which, and his refusal to be sent to a hospital, upon his consenting to submit to whatever treatment might be thought proper, I took him under my own care.

Upon the second attempt I succeeded in forcing a small tube, with the bulb at the end filed off, through the closed part of the urethra in the *corona glandis*, and which we kept pervious by leaving a portion of bougie in the part properly secured. We proceeded in this way until the 16th of December, when I was enabled to pass an ordinary-sized silver catheter into the bladder, which we retained there for a day or two, and then replaced it with one of elastic gum. After confining the patient as much as we could to low diet, from the period I first saw him, and purging him well on the 21st of December, on the following morning he was placed in the same position as for the lateral operation for stone, without being bound; and the elastic gum catheter

being again replaced by one of silver of larger size (No. 11), and, standing on his left side, I cut down with a scalpel, through the bulb, into the membranous part of the urethra, commencing the incision by the side of the anus, and carrying it forwards upon the catheter upwards of two inches, assisted by my friend Dr. Richardson, the Arctic traveller, and Mr. Devonald, who held the catheter. In this space no less than five fistulous openings were exposed, and four of them freely laid open by means of a director and bistoury. The external or skin apertures of two of these, through which the urine passed direct from the urethra, were three inches from the nearest part of the first or urethral incision, and the whole of these fistulous channels were hard cartilaginous tubes, from one end to the other.

Judging that enough had been accomplished at one time, we deferred doing more until some progress should be made in the absorption of the cartilaginous channels, and in the filling up of the incisions we had made. Forty drops of laudanum were administered. A gum elastic catheter, sufficiently large to prevent the passage of urine between its sides and the mucous membrane of the urethra, was introduced into the bladder. The bladder was emptied at pleasure by the removal of a small wooden peg fitted to the end of the catheter, and this instrument was secured in its place by proper bandages and tapes, being removed about every third day for the purpose of clearing it of mucous and sabulous matter, and then replaced with a fresh one.

The patient passed a tolerable night but in the morning he was feverish, with a full pulse and flushed countenance. He was bled, therefore, to twenty ounces; a purgative was administered, followed by fever mixture; by which means, and the constant application of warm fomentations to the perinæum, the establishment of suppuration in the wounds was accomplished, and with it these unfavourable symptoms disappeared, which for a period of forty-eight hours were rather alarming.

After a few days the remaining fistulous opening was divided; red precipitate with burnt alum was sprinkled along each of the cartilaginous channels every other day for about a fortnight, but without the slightest impression being made. With the same view caustic and nitric acid were applied, but with the same results.

It may here be thought proper to mention, that towards the commencement of the incision, namely, at the membranous part of the urethra, and about half an inch anterior to the bulb, there was but little cartilaginous matter; up to this last point, therefore, the catheter was shortly covered with a healthy granulating surface, in which space, however, but one fistulous opening originated.

As the patient's general health was now good, it became necessary to adopt some new plan of local treatment with regard to the removal of the several tracts of cartilaginous

matter. Every sort of treatment, local and general, that could be thought of, hitherto failed in destroying them, as has just been stated. Some cauterising irons were made, under Mr. Devonald's directions, of certain conical shapes, to suit the channels they were intended to traverse, and which I thought preferable to dissecting them out. These irons were first used about five weeks after the operation of the knife, and repeated every fourth day, sometimes at a white heat, but more frequently the heat was only red, and passed rapidly along the channels, carefully avoiding the external skin; after about three applications of the actual cautery there no longer remained any cartilaginous matter; and the rapidity with which the parts filled up by healthy granulations was most remarkable.

In about ten days after the first application of the cautery I carried the incision fully two inches further forward upon the catheter into a fresh portion of the urethra, cutting upon the *raphe* through the *scrotum*, drawn up over the *penis*. And here, again, we met with the same cartilaginous matter lining the fistulæ, arising from the last portion of the exposed urethra, as from the former, but which gradually lessened in induration as the incision approached the *corona glandis*. Six of these fistulæ, arising from this newly exposed portion of the urethra, were now brought into view, but four only were laid open as before with the bistoury, and the cautery was applied once to each. The remaining two opening upon the pubis could not, with any safety to the patient, be divided, and instead small setons of silk thread were passed through each. These two, we were informed, were the last that had shown themselves, and through which only a few drops of urine used occasionally to trickle when lying inclined to one side or the other.

The same success attended the use of the cautery to the four as on the former occasion; but, before we could entirely close this part of the incision, three smaller fistulæ were likewise to be divided; when, after this, and the diminution of the seton by the daily withdrawing of a thread, the parts were at last completely cicatrised and consolidated.

During all the various operations not one blood-vessel requiring a ligature was divided. The catheter, in this case, was retained for the first seven weeks night and day, after which it was only introduced at bedtime, and well secured for the night; and, at the end of a little more than three months, Wilson was pronounced cured, voiding his urine in as full a stream as he had ever done, and without the slightest inconvenience of any kind resulting either from his previous disease or from the various operations we had recourse to. He continued, however, to come to my house once or twice a-month for some time, for the purpose of having a bougie passed to satisfy me that the urethra had no tendency to contract;

and on inquiry, a few months ago, I was informed he continued well.

To the young surgeon this case presents some practical points requiring particular attention. The first is, that where the disease may be of long standing, and the *fistulæ* numerous, the operation should be done in detail, and not at once; for had we done so in Wilson's case, the febrile attack was so severe that we should have lost our patient. The second is, that the catheter should completely fill the urethra, even to stretching, to prevent any urine passing by its side, and to be constantly kept in the bladder until the cure be at least half completed, when it may be removed during the day, charging the patient not to attempt emptying his bladder without the instrument. Thirdly and lastly,—the extraordinary good effects of the actual cautery in cartilaginous fistulæ were very apparent in this case; without it we must either have lost our patient, or the operation be rendered completely abortive. In all my practice I never witnessed more immediately marked beneficial effects from any remedy in any disease, excepting only after incisions in erysipelatous inflammation. I have also, of late years, found the occasional application of the cautery very successful in arresting the destructive progress of lupus, and other kinds of phagedænic ulcers, and in stopping hæmorrhage where circumstances preclude the convenient application of a ligature to the bleeding vessel. The use of this powerful remedy is well known on the Continent, where it appears never to have been laid aside, as in England; but the practice of our continental brethren is now become well known and appreciated in this country.—*Edin. Med. and Surg. Journal.*

SUPPLY OF WATER IN INDIA.

From an article, written by the Editor, in the 2nd number of the *India Journal of Medical Science*, it would appear that Calcutta is as fully provided with bad water for culinary and other uses, even *pro potu ordinario*, to use a medical phrase, as our far-famed metropolis. That the City of Palaces should thus suffer, and that, too, at a season and in a climate where there is certainly no superfluity of moisture in the human system, is monstrous, and calls aloud for remedy. Our rich drink their wine, and care not for the impurity of the water; our poor discuss their spirits, and reject the weaker, and scarcely less impure, fluid; but the unfortunate Indian cannot procure either of these liquors, and must content himself with the foul and brackish water of the tanks or of the river. But we will allow our brethren of the Indian Medical Press to speak for themselves.

“The state of the weather during the greater part of last month, and more especially between the 8th and 25th, was oppressive to a degree that we scarcely recollect anything to equal it.

The usual north-west winds during this scorching interval were wanting, and the nights were overpoweringly sultry. In the morning the thermometer generally stood at 92°, and in the middle of the day at 96°, and even higher in some houses. Although, generally speaking, we are disposed to consider the warm weather as, on the whole, the most healthy in the year, yet when the heat becomes, as it did during this season, extreme, it must be expected that a great deal of sickness will be the result, more especially among those who are much exposed to its unmitigated power. Even to persons who remained all day in the house the sensation of heat was intense; what, then, must it have been to those whose occupations required them to be much in the open air! All classes, indeed, at such a juncture suffer from excessive thirst. To allay this, the mass of inhabitants look to the river and the tanks. The water in several of the latter, however, has been exhausted in watering the roads; and the river, and the remaining tanks, generally become brackish during the hottest part of the season. The water in the Lalldingy, for instance, is usually pure, soft, and sweet, but of late it became so disagreeable, that most persons who could procure water elsewhere gave up drinking it, and preferred sending for some even as far as Allipore. We have tried the experiment of filtering and purifying the Lalldingy and river water, but without the effect of rendering it palatable. It is all very well, however, for those who can mix some qualifying ingredient with indifferent water, or who have some other means of quenching thirst; but it is very different with the poor—and with the natives generally, rich or poor. They have neither tea, nor beer, nor soda-water, nor brandy and water; they must trust to the brackish and foully surcharged water of the river, or muddy and half evaporated tanks reeking with fish. The English, perhaps of all people, are most indifferent respecting a supply of that vital element, water; their own country abounding with the purest water, they apparently do not consider that it is very much the reverse in other places. We have now been in possession of India a sufficient length of time to make us blush to think how little has been done towards the supply and conveyance of water for the purposes of comfort and existence. What would not the Romans have done in the same space of time! What is the remedy for this? To us it seems that the proper remedy, in the first instance, is, to draw water from the river *only* for sprinkling the streets—but it would be proper, for meeting the wants of the city in an efficient manner, that one or more steam-engines, like that at Chandpaul Ghaut, should be erected; this would leave the tanks with their proper supply. But, in addition to this, the earth ought to be bored for springs, which would afford a permanent supply of pure and fresh water that would not be affected by the state of the weather. An experiment of boring for spring water has been going on

for some time in the Fort; but there is no valid reason why one or more such should not be tried in other spots that may, for aught we know, be more favourable for the purpose. Two or three artesian springs in Calcutta would be a source of immense convenience and blessing to the poor, thousands of whom perish annually, in the hot weather, from the badness of the water."

Reviews.

Consumption, Why so Fatal? What are the Means by which it can be Prevented in those Predisposed to, and its Progress Arrested in those already Affected with it? The above Queries solved in a manner intelligible to every Reader, Experience and Common Sense furnishing the Solutions.
By JOHN TYRRELL. London: Renshaw. 1835.

THAT a non-medical man should write a book on phthisis pulmonalis certainly savours of presumption, seeing that all the talent of the profession has been expended upon the subject almost in vain; yet, on the contrary, it may not be impossible that, since the profession has failed, an amateur, unworped, as we should imagine, by physiological subtleties and scholastic dogmas, may meet with better success.

Let us see what the book contains, what are the topics discussed, what the arguments advanced, and the conclusions which are arrived at. The professed object of the work is to show that consumption is not curable, and why its fatality? The first position is proved by the concurrent experience of all ages and all nations, save one or two arrogant individuals, and a few old women, who impotently affirm its curability. The writer of this volume has afforded himself and his readers a copious illustration of opinions in the writings of almost every writer on consumption. There is, moreover, a strange medley, for besides the opinions of Hippocrates we have a short account of his birth (as well as his contemporaries), and a statement of his talents and renown. Not one of his doctrines, however, are relevant to the object for which they were adduced, mere isolated aphorisms, common assertions without proofs, or even the attempt at proofs. Celsus comes next under contribution. Celsus was, no doubt, a great man, and so was Julius Cæsar, but neither of them knew any thing of consumption.

"For phthisis Celsus advises change of air." He recommends milk diet, and "an ulcer is to be made with a red hot iron under the chin, another under the throat, in two places on each breast, likewise at the extremities of the blade-bones, which wounds are to be kept open till the termination of the cough, &c." "The principal things are diet, gestation, sailing, and gruel. He who begins to be a little better should increase his exercise, friction, and food,

then rub himself holding his breath." Thus we see that Celsus did, however, know as much as even we learned physicians of the nineteenth century how to treat consumption. His knowledge of the pathology of the disease was scanty, nay he knew nothing respecting its nature. Why the author before us should have quoted Celsus on consumption is to us paradoxical. Then comes another bright luminary, "Galen," who treated consumption as we of the present day do; some severe forms of the malady he pronounces very shrewdly to be incurable, certain mild ones to be curable. The character of this triumvirate, by Bacon, whom our author has adduced for what purpose we are unable to opine, we shall give to our readers:—

"Galen," he said, "was a man of very narrow mind, a deserter of experience, an idle caviller. This is the man that would screen the ignorance and sloth of physicians from their deserved reproach, and preserve them unattacked, whilst himself most feebly and unequally pretends to perfect their art, and fill up their office;—this is the man that pronounced certain diseases incurable, taking away all glimmering of hope, and leaving no room for future industry;—this is the man who, upon every occasion, maliciously curbed the human power, and endeavoured to surround and protect ignorance with eternal despair.

"Let Hippocrates be next called to the bar, whom we arraign as a creature patched up of antiquity, and a retailer of other men's knowledge; under whose authority both Galen and Paracelsus ridiculously endeavour to shelter themselves, like asses under a tree. To do him justice, he seems to have his eyes at first fixed upon experience; but then they are fixed indeed—stupid and immovable, without ranging and searching for noble, manly, and full views.

"Celsus comes nearly up to the views of Hippocrates, which are not so faulty as they are useless; but he shews himself a mere practised sophister, and a better modeller of history than his master. He is, however, for checking science, from moral and civil considerations."

Mr. Tyrrell takes a cursory glance at the various opinions on each question, of cause? pathology? and treatment? and he arrives at the following conclusions, which we shall extract at large:—

"That it depends upon the softening of tubercles.

"That debility of the lungs always precedes their production.

"That the debility necessary to their production is excited and increased by every species of pulmonic disease, varying with its extent and duration, from common catarrh to acute pneumonia.

"That the power of resisting the exciting cause of tubercles depends upon the strength of the constitution and the previous habits of the individual.

"That tubercles are imperfectly organised.

"That so long as they are protected from inflammation and suppuration, they will not, *per se*, prove fatal in one instance perhaps out of five hundred.

"That the same means which prevent the inflammation of tubercles will tend to prevent their increase.

"That the suppuration of tubercles is so far connected with the existence of expectoration, that the former *never* occurs without the latter.

"That the congestion *always existing* in the lungs during the softening of tubercles, should, in every case, be the first object to remove.

"That the necessity for its removal and the means are the same in either case—whether we consider the tubercles vascular or inorganic—whether as vascular bodies they suppurate, or as inorganic they are softened.

"That deep inspirations and strong expirations of cool air can, like vomiting, reduce this congestion, without exciting a similar exhausting languor and lethargy.

"That, provided hæmoptysis does not exist, this inhalation of cool air can *never* be injurious in any pulmonic disease.

"That the same process of inhalation can be serviceable to persons in comparative health.

"That such inhalation, like vomiting, stimulates all the secretions concerned in chyli-fication, and contributes to remove dyspeptic symptoms, by reducing any existing congestion in the liver, spleen, or other abdominal viscera."

Now after the remarks we have made, and the extracts we have given, our readers may be safely left to form their own opinions on the value of this work on consumption by an amateur writer. We are not in the habit of condemning a production because it has a few faults, nor of giving it unqualified approbation because it may possess a few beauties. A subject of such vast importance, however, as consumption should not be treated upon, except by one who is thoroughly versed in all the varied departments of medical science; to elucidate it accurately, that it may be acceptable to science and aid us in our therapeutic measures, requires the most profound logician, one who, like the mathematician, takes nothing for granted but what can be substantiated by an immense series of facts, or supported by the closest analogies. The ancients indulged in hypotheses on consumption, as they frequently did on every other subject, and they produced doctrines which advanced science and increased experience have totally exploded. The immortal discovery of Laennec, the patient observation of Bayle, the great experience of Louis, not to omit many of our own countrymen, have taught us to recognise consumption during life, to distinguish its stages and its progress to an almost unerring certainty. But they tell us the lamentable story of its *incurability*. When

St. John Long said he could cure consumption, the British profession reviled and mocked at him as a vile impostor. Facts at the present collected warrant us to affirm with boldness, and yet we trust with that modesty which should ever be the companion of science, that no remedy has yet been discovered for consumption. Dr. Mossman said that digitalis would cure the first stage of consumption, would as certainly cure the second, and as certainly alleviate the third. Experience denies the statement. What medicine has not been tried for its removal, what means have not been devised? the mind has tortured itself to discover a remedy, but all to no purpose. It is a melancholy reflection, but a fact.

We do not think the author of this work has added anything to our stock of knowledge on this complaint. He has made a fair compilation, which does him much credit, but we do not think he has accomplished the objects of his laudable undertaking, yet the book will no doubt be read by the public.

A Manual of Experiments illustrative of Chemical Science, systematically arranged.
By JOHN MURRAY, F.S.A., F.L.S., &c. &c.
London: Henry Renshaw. Pp. 156.

Chemistry is a science of demonstration; it requires, in the individual who cultivates it successfully, almost unremitting toil, and an observation unwearied. Speculation has done little in advancing its progress; and the student who wishes to acquire its treasures must labour for them himself, and the laboratory must be the scene of his study.

The little work before us has arrived at the fourth edition in a very short space of time. At this circumstance we feel no surprise, when we remember that it is small in compass, and the production of one of the first chemical experimenters, and one of the first scientific men, of the age. The following is the table of contents:—"Remarks on the New Nomenclature—Theory of Definite Proportions—Definition of Gases, and Method of preparing them—Experiments illustrative of Chemical Science systematically arranged—Tests for the Detection of Metallic Poisons—Mineral Waters and their Contents—Nomenclature—Vocabulary of Technical Terms—Tests or Re-agents required in Chemical Analysis—Some Apparatus requisite—Descriptive List of some particular Apparatus."

At page 21 the author seems to doubt the validity of Sir Humphrey Davy's theory on the liquefaction of carbonic acid gas by the elastic force of the vapour of sulphuric æther, combined with the application of heat. In support of his objection he advances the subsequent remarks:

"I am not without considerable scepticism on this question. Some years ago Sir David Brewster showed me an experiment in conjunction with the singular expansion of the fluids in crystals, then a recent discovery of

his, which, by the approach of a heated wire, completely and instantly filled their respective cavities. The experiment referred to consisted in introducing into the fire a tube, *partially* supplied with sulphuric æther, when the liquid expanded and entirely filled the tube. It was necessary to screen the face, from an accidental explosion, by sheets of talc, which permitted the experiment to be seen, and yet formed a defence against possible injury. The peculiar character of the vapour of æther, referred to as my discovery, being extremely elastic, yet capable of condensation into a liquid form, would render the liquefaction of the carbonic acid gas as a phenomenon extremely equivocal in this particular instance."

In the next page, when discussing the application of highly compressed gases as mechanical agents, he states that, with reference to liquid carbonic acid,—“Vessels sufficiently powerful to resist its tremendous power have not, however, yet been found, and are likely to interpose a barrier for some time to its practical employment; besides, the liquid gas is found to exude even through metallic cylinders;” he then introduces a good cautionary remark on the dangers which are liable to accrue in their formation.

“The preparation of these liquid gases is so pregnant with danger, that their introduction and exhibition in a lecture-room are not *warrantable under any circumstances*. Whatever risk the operator may personally choose to run in his laboratory, he incurs a frightful responsibility in daring to bring the lives of his auditors into jeopardy. It is hoped that the recent melancholy death of Mr. Barry will operate as a salutary caution and warning against introducing such dangerous and formidable materials. In braving the dangers of the laboratory I will yield to none; but I should tremble to peril the lives of others.”

The following is a pretty illustration of the “Indestructibility of Matter.”

“Pour a solution of caustic potassa into a vessel containing carbonic acid gas, and cover it immediately with a wet bladder, then shake it, and the bladder will become hollow. Add a little muriatic acid, and the carbonic acid will refill the vessel.”

By this, of course, the author does not mean that any portion of matter has been annihilated, but there is an apparent indestructibility of matter from the absorption of the carbonic acid by the potassa, which, on the addition of the muriatic acid, the two former elements are again disunited.

It will suffice for us to state, that each topic enumerated in the contents is treated in a concise yet lucid manner. The majority of the important facts in chemistry are brought under the notice of the reader, and the data upon which these facts are founded, and the means of verifying their accuracy by the most simple experiments, are shown. We may be allowed to give the following facts which the author enumerates respecting carbonic acid gas:—

Carbonic Acid Gas.

"I. If a taper be inflamed and introduced into the gas it is extinguished.

"*Ration.*—This proves its negation in combustion.

"II. If we breathe, by means of a tube, through *lime-water*, it will become turbid or cloudy.

"*Ration.*—Carbonate of lime is formed. The carbonic acid evolved from the lungs combines with the lime, and forms an insoluble carbonate of lime.

"III. Hence, if a little *lime-water* be poured into a vessel containing carbonic acid gas, it becomes milky.

"*Ration.*—Carbonate of lime is formed, as in the previous example, evincing at once a distinction between azote and carbonic acid gas.

"IV. This gas may be poured over a candle, when it will be extinguished. It may also be *laved* from one vessel to another; transferred or emptied by stopcocks, and poured through a funnel, or pumped out.

"*Ration.*—These interesting facts show its superior specific gravity, and the various modes by which it may be got rid of, as being pumped from a well, mine, &c., or emptied by the spigot from the fermenting guile.

"V. If tapers of *unequal* heights be placed in a tumbler, and this gas be poured gradually into the vessel, the lowest will be first extinguished, and the others in succession.

"*Ration.*—This shows that the gas will repose in the lowest stratum of the atmosphere of a mine. It also illustrates the phenomena of the Grotto del Cane, near Naples.

"VI. Phosphorus previously kindled will burn with a lambent flame in this gas, and the mingled vapour will render the gas visible.

"VII. A wide-mouthed phial or cylinder entirely immersed in this gas will be filled with it, the previously contained air being displaced by the heavier gas."

We recommend, with great pleasure, to our professional brethren Dr. Murray's little book. It is certainly well executed: it is partly, as the author frankly confesses, a compilation, but interspersed, we must add, with many useful and judicious reflections.

FOREIGN MEDICAL LITERATURE.

Memoir of the Epidemic Dysentery of Maine-et-Loire in 1834, presented to the Medical Society of Angers.

BY J. GUÉRETIN,

First In-door Surgeon of the Hôtel Dieu of that Town.

THIS Memoir does not give an account of the epidemic, but a summary of cases observed by the author himself, with some additional information collected from other practitioners,

but in a manner too vague to be satisfactory; on two points, however, the Memoir deserves especial attention.—first, on the anatomical alterations, and, secondly, on the use of neutral salts as the mode of treatment.

In twenty-five post-mortem examinations, M. Guéretin asserts that he uniformly found wounds in the large intestine, which presented the form of turgid swellings and of ulcerations, the former much resembling urticarious patches, of a greyish or blackish hue, the fainter discolouration appearing to be the first shade of the second, and exceedingly like gangrene of the mucous membrane; yet this membrane he never found in a gangrened though frequently in a slightly softened state, especially between the greyish swellings; and this appearance, at a time when the morbid alterations in this malady were not so well understood as at present, led many to the belief and assertion of gangrene of the mucous membrane of the rectum being often found in this malady.

Antiphlogistic treatment, according to M. Guéretin, had not the effects usually wrought by it in affections purely inflammatory: opiates succeeded in some cases, failed in others, the effect in all appearing to vary with the locality. But on the use of neutral salts he insists much, avowing at the same time that he did not employ them in the first stage of the epidemic, its symptoms then being so intense and alarming, it spread so rapidly, that neither he nor any other practitioner would venture to administer purgatives; doubtless deterred by the opinion still generally held in the profession, that purgatives have no effect but that of irritating the intestinal mucous membrane. It was therefore when the epidemic had lowered in intensity, and all its symptoms had become of a less aggravated character, that M. Guéretin had recourse to the treatment by neutral salts, so that we are absolutely without data as to what their operation might be if used at the point where all other medications were found to fail, and where consequently their efficacy or nullity would have been best ascertained. On the malady in its ameliorated state, their effect was as follows:—

The salts administered pure, or mixed with an ounce or two of manna, from two drachms to one ounce of sulphate of soda or of magnesia, were followed in the course of a few hours by evacuations, easier, more liquid, and abundant, and especially less sanguineous; tenesmus lessened. The affection in the greater number of patients did not increase, and the liquidity of the evacuation commonly disappeared from four to eight hours afterwards. With about half the number of patients there was a relapse in twelve or thirty-six hours, which yielded only to a fresh dose; in short, the neutral salts were found to ameliorate, but never to aggravate the symptoms of the malady under any circumstances. But the most noticeable point is the influence of locality in their result, of which M. Guéretin

cites many examples. Patients, he says, living in districts unfavourable to the operation of salts, on removing to more favourable spots, have derived full and immediate benefit from their use.

History of the Epidemic Dysentery in Bretagne.

BY MM. VERGER AND CHAUVIN.

The authors begin their memoir with a complaint of the indifference with which facts tending to illustrate the rise and progress of epidemics are too often overlooked in the provinces. The complaint, though much too general, is just. The *Gazette Medicale* has indeed furnished a great number of valuable documents on the subject, but much yet remains to be done. In truth, great benefit would result to science were the appearance of every epidemic noted down, and its progress studied by the periodical medical press. But first, the doctrine which identifies the same malady in every case, must be entirely done away with, a doctrine which, if not professed, is at least admitted by the school of Paris.

The memoir of MM. Verger and Chauvin contains some researches on epidemics in general, which belonging to general pathology are not at this moment of interest, and the epidemic of which they treat having long since subsided; another letter also being announced by them on the same subject, we shall forbear, until after the publication of that document, to make known the facts which may probably prove of some importance to the progress of science.

Colica Pictonum accompanied with severe Cerebral symptoms—Obscurity of Diagnosis—Death—Remarkable Alteration of the Intestines.

COMMUNICATED BY DR. LEBATIER.

— Gruneberg, 15 years of age, was admitted into the hospital on the 5th Feb.; he had been inoculated three times, but no eruption had ever appeared. A few months prior to his admission, he had been employed with several other lads in the manufacture of silver and gold-gilt paper; all of them had from time to time suffered colics more or less violent, and many had in consequence been obliged to change their employment. Gruneberg himself usually eased his sufferings by drinking sugared milk, but was at length obliged to go into the Hospital of St. Louis, whence he returned at the expiration of six days tolerably well recovered.

Feb. 2nd. After a night of great agitation, he was suddenly seized with violent cephalalgia, vertigo, and dilatation of the pupils.

5th day of his admission. Answered fitly to all questions; pressure on the abdomen relieved rather than increased the suffering; painful numbness of the limbs; pulse rather raised and frequent; cephalalgia much lessened: treatment as for metallic colic. During

the night, agitation, approaching delirium, copious vomiting, prostration of the upper members; pulse 112 to 115, strong and vibrative; twelve ounces of blood taken from the arm.

6th. Still the same prostration; strong pulsation in the crural artery; the slightest pressure on the muscles of the thigh painful; no evacuations; slight mucous rattling in the chest. Eight leeches were applied during the night behind each ear; no sleep; pulse 120.

7th. Pulse 80; squinting at intervals; deglutition difficult; tongue moist, and rather white.—Purgative lavement, seton in the nape of the neck, blisters on the thighs, ammoniac blister on the forehead.

8th. Variolous eruption; pimples red, prominent, and papulous, covering the whole body, and more particularly thick over the face and upper members; a nettle-rash also appeared on the arms, right shoulder, and parts of the back; many of the urticarious patches were red, others pale, all prominent, fore right arm covered with them; the variolous pimple centred within the urticarious patches, but he had no seeming consciousness of either pruriency or heat in them; pulse 84; sinapisms were applied to the legs; general state of sensibility obtuse, and so continued; cerebral symptoms the same. The variolous eruption progressed pretty regularly until the 17th, when the general symptoms became worse; pupils less contractile; head thrown back; teeth and gums fuliginous, and on the 20th he died. Forty hours afterwards, the post mortem examination presented,—

Skull.—An incision of the membranes of the brain was followed by a flow of serum, of which the veins to the left were fuller than those to the right, each ventricle containing about a teaspoonful.

Thorax.—Lungs normal; dilatation of the right ventricle; and the left presents a concentric hypertrophy.

Digestive Organs.—The stomach presented many deep furrows, much thickened, and slightly softened; the small intestine with isolated follicles and some patches, more discernible towards the cæcum. In the large intestine Brunner's follicles were more developed; on the valves they were black, protuberant in the centre, and the size of a small lentil seed; in the larger colon and in the rectum, these projected various heights, were diametric, and in great numbers; these projections, somewhat like the tubercles formed under the skin, were of a brownish green colour, striated with dingy white; summits ulcerated, edges unequal and notched, not softened but rather resisting the knife beneath the ulceration. Nothing abnormal in the rest of the organs.

In the above case we may remark that during life there were two totally distinct maladies, metallic colic and small-pox; but the post mortem examination presents a complication of maladies seldom found, and accounts satisfactorily for the force of those symptoms

during life, which were inexplicable either by metallic colic or small-pox, namely, the alteration of Peyer's glands, to which it is far more natural to attribute the cerebral affection; the intensity of the febrile symptoms, the adynamic state, and, finally, death itself. And, further, this alteration of the glands, the immediate cause of death, though unknown during life, was revealed by an observer, on whose exactitude the most perfect reliance may be placed.

Considerations on Impotence as a cause of Nullity of Marriage, with Reflections on Fecundation.

BY M. BEAUDE.

An interesting cause in the *Legal Medical Report* gave rise to M. Beaudé's considerations; but we will first give a concise summary of the facts.

In 1822, Miss N— was married to the Sieur X—, and some years afterwards sued for the dissolution of the marriage, alleging as the reason, that her pretended husband was a man only in name, had not the male organs of generation, and, moreover, was regularly visited by the monthly incommidity to which females alone are subject.

The Tribunal, much struck with the fact, gave, in April, 1834, the following judgment: "As no marriage is legal between two persons of the same sex, the petitioner must prove the facts which she alleges; and the person of the Sieur X. must be submitted to the inspection of M. A. Dubois." The result of this personal scrutiny is given in the *Report* for July, 1834, and nearly in these terms—"The Sieur X. is a male; has two testicles like other men; the appearance of a penis, though very small, ill-formed, and without the urethral canal; it exists, however, though not in its right place, and by its position incapacitates the Sieur X. from performing the necessary function of conveying the semen to the orifice of the vagina, and thence to the uterus; and, briefly, the truth is, that the Sieur X. has not, never has had, never can have, the powers necessary for the propagation of his species.

"It is however true, that, to an eye unaccustomed to the view of such conformations, the Sieur X. has, at the first glance, the semblance of a woman, but an attentive examination, aided by anatomical skill, readily ascertains that each division of the scrotum (somewhat resembling one of the great labia of a woman) contains a testicle, the cord of which is easily traced towards the abdominal ring on each side, and that which at first view might appear a large clitoris, is in fact a small penis, without, as before stated, the urethral canal. On raising that which has the appearance of two large coverings of a valve, the small orifice of the urethral canal is perceived at the bottom, very distant and beneath the penis; this position of the orifice, and it is merely an orifice, having no length, must oblige the individual

so formed to squat down when he urinates lest he should wet himself.—A. M. DUBOIS."

In consequence of this report, final judgment was awarded on the 17th of last December, and to this effect:—

"As the Sieur X. is really of the masculine gender, the defects of his conformation, whatever they may be, do not nullify the marriage; and this doctrine is in conformity to the spirit of the civil code, the object of which is to put a final stop to the scandalous processes founded on the impotency of husbands, which were wont to take place under the ancient legislation.

"The Tribunal declare Madame X. nonsuited, with costs."

M. Beaudé arraigns the justice of this judgment. "Nothing," he observes, "can be more clearly evident than that the Sieur X. is a man only in name; where then is the moral propriety in condemning the woman to live with such a shadow? Does the Tribunal, whose modesty takes the alarm at the bare recollection of the ancient legislation, consider adultery, the only compensation left to the woman, as so innocent an alternative, that it may be, as it were, prescribed to her by their judgment? Again, it was under the ancient legislation that impotence arising from mal-conformation was exempt from the scandal attached to that which arose from other causes. In short that the civil code which on that point differs from the ancient, did formerly permit divorce as an alternative; and now that divorce is abolished it ought necessarily to return to the spirit of the ancient legislation."

To these arguments, the drift of which cannot be denied, M. Trebuchet adds others in a letter on the same subject in the succeeding number of the same Journal.

Whether from negligence or fear of scandal the civil code does not mention impotence among the causes of nullity of marriage, it confines itself to the general expression *error of the person*, without giving any intimation of what is to be understood by those words, nor is any to be gained from the discussions which took place at the time of its compilation, except that by *error of the person* is not meant a mere error with reference to the qualities, fortune, or condition of one of the contracted parties. But this M. Trebuchet thinks is too rigorous an interpretation; would there not be error in the person, he observes, if, with the natural view in marriage, a woman marries and finds her husband an eunuch?

But the more decisive argument is perhaps this:—The contract of marriage is subject to the general rules of all contracts, one of the most essential being—consent to it; which becomes null and void if given under error, or obtained by deceit (Code Civil, art. 1008-9). If the parents and woman had known that the intended husband was radically deprived of the signs of virility, would they have consented to the marriage? Certainly not; therefore, the consent having been obtained by

culpable deceit, becomes null, and of course the act which is the consequence of it. So thinks Merlin; and Toullier, waving the consideration of impotence which may supervene posterior to marriage, is of opinion that real impotence preceding that contract nullifies it. First, because Art. 312, Code Civil, permits the husband to disown an infant, if at the moment of presumed conception he was, by the effect of accident, incapable of cohabiting with his wife. To these imposing authorities may be added that of the Cour Royal of Treves, which annulled a marriage in 1808 on similar grounds. As physical causes and defect of conformation are the obstacles which oppose the natural and legal aim of marriage, it is of right annulled. Secondly, the nullities mentioned in the Code Napoleon have evidently no bearing but upon the cases foreseen by the same Code.

But, on the other hand, the general opinion of the courts and tribunals of the present day is against these causes of nullity; and authorities are not wanting in opposition to those of Merlin and Toullier. Favard de Langlade, for example, holds an opinion directly the reverse; so that even M. Trebuchet himself, though seeming inclined to the admission of these nullities as valid, remains still in doubt. This strife in opinion amongst such respectable and competent authorities warns one to circumspection and reserve; a few observations, however, may be permitted.

The Law Report peremptorily avers that the Civil Code does not admit impotence, even from mal-conformation, as a nullifier of marriage: thus they allege *error of the person*. But are there not very many deformities of persons, which, if known, would prove preventives to marriage? but which, nevertheless, can scarce be classed as error of the person, or denominated deceit. Waving those personal deformities, so carefully concealed, what if extreme narrowness of the pelvis oppose an invincible obstacle to the hopes of maternity? Would it be considered as a nullifier of marriage? In the majority of cases it would at least stand a pretty fair chance of operating as a preventive to marriage.

A more weighty consideration is, that the law, in maintaining the marriage, permits the mal-conformed husband to disown the offspring of it, since it is always in his power to prove his incapability of cohabitation. But even this argument appears so little peremptory to Toullier, that he applies it only to cases of impotence before marriage. Whether before or after, are not the dangers of it the same? The clearest point of the whole reasoning on the matter is, that the authors of it, recognising a material defect in the Code Civil, have generously supplied it, and have tortured the sense of the law to make it say what it does not mean. The Tribunals have not ventured to act upon such perilous interpretation;—we, therefore, cannot entirely coincide with the opinions of our honourable associate M.

Beaude. He gives, it is true, due credit to the primitive code, which granted divorce as an alternative; but even that could not in the present case have been demanded but by mutual consent of the parties; and why, then, should he be inculpated if he does all that his organisation permits him?

But M. Beaude is, we think, perfectly right when he exclaims against the iniquity of such a result. The judgment of the Tribunal was right, but the law which guided them altogether detestable. The Legislature ought to interfere, and hasten its correction; and we ardently hope, therefore, that M. Beaude's appeal to it may not be made in vain.

When we consider the question scientifically, we cannot fail to see that part of the error of the law rests on the science of anatomy and physiology. The first inquiry made and solved on the examination of a monster is, of course,—Is it a male or female? Neither anatomy nor law acknowledges more than two sexes; nevertheless, it is well known, and is again demonstrated by the case in point, that there is a third variety of the human species called *hermaphrodite*, that is, both male and female, or, more properly, it would be named *anhermaphrodite*, neither male or female, which is the absolute fact. Now, if this view of the matter were admitted, it would naturally, properly, and entirely, rectify the error of the law. Thus, in the Report, otherwise so precise and judicious, of one of our most learned men, instead of finding *the Sieur X. is a male*, which is not rigorously true, we had seen *the Sieur X. is neither male or female*, the marriage would have been declared null, since the law only permits marriage between persons of different sex; law and equity would then have accorded, and without disparagement to science.

This discussion throughout has had reference to prodigies only. Another case may occur; and although we no longer mutilate our children for the service of operas, or the pleasure of monarchs, we have actually eunuchs, become such from accident, vengeance, or malady, or from one of those horrible operations for the cure of hernia still tried in our provinces by the wretched sufferers. If, then, an enuch concealing his state were to marry, ought the marriage to be annulled? The Code is silent; the decision is remitted to the entire arbitration of the man of art who is summoned to declare, whether the husband be of the masculine gender? Truth obliges him to say, that he has been, but is no longer so. Yet another, and a nicer question, since even M. Toullier himself has failed to meet it with the same courage he did the first,—whether the loss of virility after the consummation of marriage be not also an available cause of nullification? To us it appears that the solution of the first question inevitably gives the second, the same arguments having the same weight on both sides; and every part of the discussion proves the neces-

sity of re-establishing and completing the law of divorce. We cannot wind up this article better than in the words of M. Beaudé, "Let us hope that the day of justice will at length dawn, a day as anxiously looked for by the friends of morality as by the friends of humanity."

Memoir on a new sort of Medicated Cushion-Bandage for the Radical Cure of Hernia.

BY DR. JALADE LAFOND.

In former times, when surgeons had renounced those painful operations by which they intended to prevent the recurrence of hernia, the treatment of that affection remained almost entirely palliative, and it is only within these few years that they have again turned their attention to its radical cure. Not to mention the brilliant but perilous operation of M. Belmus, others have attained the same end by permanent compression, aided by a prolonged recumbent position; but this condition brings with it extreme constraint and weariness; pain and even danger of short duration are preferred by the greater number of sufferers to a prolonged treatment, however easy and certain it may be.

Such being the state of the matter, the first question arising is,—is the horizontal position really indispensable? In standing or walking, the abdominal viscera press more on the hernial openings than in a state of repose; still there must be pressure, and certainly the action of a proper bandage well adjusted is in this state the first curative power; indeed by it alone cures have been successfully performed, chiefly among children and young people.

M. Jalade Lafond has followed up this idea; but, never trusting to it singly, has imagined the union of it with a medicinal action. Accordingly he has invented a bandage, the cushion of which may be rendered hard or elastic at pleasure, and containing a reservoir for the medicated substance. The cushion elliptical and convex is bored in the interior with an elliptical cistern composed of four elastic plates, resting on, and rivetted to, a fifth; the bottom is pierced with a great number of little holes like a sieve, and the whole is covered over with prepared Indian rubber, pierced also with innumerable holes for the issue of the medicated substance to the skin. The medicament is introduced into the cushion by an exterior hinge, supported by a sliding bolt. The power of the medicament, which ought to be astringent, is modified as occasion requires.

Thirteen detailed observations verify the success of this invention; ten of the cases were inguinal, intestinal, or epiploic herniæ, of from three to more than twelve years' standing, in subjects from fourteen to forty-seven years of age, requiring from two and a half to six and a half months for the cure; in one case only, two years; in another, the hernia disappeared but the ring remained, and it was

thought prudent to continue the use of the bandage. Two other cases of umbilical hernia, the one of ten years, was cured in five weeks, the other, of a date not quite so ancient, required four months for its disappearance; and, lastly, a case of crural hernia, the consequence of labour, disappeared totally in the course of three months.

From all which it appears that the duration of the treatment is variable, depending neither on the age of the subject, nor on the date of the malady, and we add, nor on its nature; some occult influence there must be, arising, it would seem, from the constitution of the subject, as neither the size of the hernia nor the extent of the opening account satisfactorily for such a variety of results.

In general the treatment is simple, and without symptoms, but several times inflammation of the integuments supervened, pains in the abdomen and in the iliac fossæ, and once also violent inflammation in the abdomen, which, however, soon subsided. Did these symptoms arise from the action of the medicament, or from the pressure of the bandage? We think, the cutaneous irritations excepted, the bandage was the cause of all. M. Lafond notes a case himself, in which the pains returned immediately on the recommencement of the pressure; in all cases the treatment should be suspended until the symptoms have disappeared.

It now remains to be inquired, what share in the cure had the medicament, what the bandage? M. Lafond, who could best make answer, has not yet thought fit to touch upon the question. To us it appears that the bandage had the greatest if not the sole agency in the success.

It is necessary here to observe that the author has not, we think, given sufficient weight to certain precautions. Most of the patients who came to him wore bandages, ill-formed as to the cushion, or of too weak a spring; now he especially endeavours to make the pressure equal and perfect on all the points necessary. We are therefore inclined to think that had those persons been fitted with suitable bandages, the radical cure would have been more frequent. A proof in point occurs in the author's eleventh observation: a man, forty-five years of age, with an entero-epiploic hernia of prodigious size, and of twelve years' standing, which had been considered as adherent, had a circular bandage, which was properly adjusted, and which consequently, renewed but once, sufficed to obliterate the ring.

When the obliteration is ascertained, the apparatus must not be altogether removed. M. Lafond then applies a bandage of a gentle and continued action that supports the obliterated ring and favours its consolidation. For this purpose he has invented an air cushion.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 21st, 1835.

Dr. ADDISON, in the Chair.

THE members present returned their unanimous thanks to Dr. Addison for the valuable remarks offered by the Doctor on auscultation at the two preceding meetings.

Dr. Johnson then related a remarkable case of a young gentleman, *ætat.* 22 years, who had previously enjoyed, up to the period of the attack, sound health. Febrile symptoms first presented themselves without any organ being in particular implicated more than the rest. However a determination to the head, accompanied with typhoid symptoms, ensued, followed by an alarming hæmorrhage from the bowels, filling three or four large utensils. The delirium subsided, but great debility with a small quick pulse remained. The patient was an only son, and his parents were very anxious for the doctor's prognosis. A favourable one was given, as he considered that hæmorrhages, occurring under such circumstances, did not prove fatal. The gentleman rapidly became convalescent. Suddenly a new phenomenon manifested itself, where both ankles became affected, but exhibited no external inflammatory characters, such as swelling, heat, redness, excepting an exquisite sensitiveness, so much so that the sufferer was compelled to lie with his legs uncovered, the weight of any clothes being insupportable. The remedies prescribed afforded not the least relief. The sensitiveness all at once disappeared, but the same train of typhoid symptoms set in, accompanied with a second hæmorrhage, but not so profuse as the first. The plumbi-superacetates, combined with opium, followed by small doses of the *magnesia sulphas*, were ordered. The second day there was no hæmorrhage, but symptoms of low fever with delirium continued. On the fourth day the hæmorrhage returned, and the patient sank. Permission was not granted to inspect the body.

The President requested to know whether calomel had been administered, as he considered it was often prescribed without due care.

Dr. Johnson replied it was given, but not to any extent.

Mr. Horne said he did not rise with the intention of contradicting Dr. Johnson's opinion as regarded hæmorrhages, or putting his small experience in the balance against the learned Doctor's. But a case of typhus had lately come under his notice, in a youth aged 14 years, where the disease was going on to convalescence, and most unexpectedly a fatal collapse took place, for which Mr. H. could assign no cause; nearly half a pint of a gin

was poured down the throat without any benefit, death ensuing about two hours after the sudden change. On throwing off the bed linen the mischief was found to arise from a hæmorrhage from the bowels to an almost incredible amount. The viscera examined were healthy, except the mucous membrane lining the alimentary canal, which was softened and at one place partially ulcerated. Before sitting down the speaker remarked, that he was not aware that his case was an exception, and he also believed that authors were not silent on the subject.

Mr. Elwyn alluded to a case of typhus, which had been received into the Middlesex Hospital, under the care of Dr. Watson, that proved fatal after hæmorrhage from the bowels, where an ulcerated state of the mucous membrane was detected.

Mr. Taylor made some remarks on the same subject, and in favour of the last two gentlemen, but he spoke so low that we could not follow him.

Dr. Johnson inquired if any member had witnessed the surprising effects of Ruspini's styptic in arresting hæmorrhages, not that he was an advocate for patronising quack nostrums, but still he must confess that this possessed extraordinary power, although perfectly tasteless and colourless, and apparently harmless where its astringency was not required, for he had himself swallowed a tablespoonful, that being the quantity directed to be taken according to the printed directions, without experiencing any change.

Mr. Chinnock replied that he had tried its power with the happiest result, especially in a case where hæmorrhage followed the extraction of a tooth, in which case every known remedy was previously had recourse to without arresting it. Mr. C. recommended also the administration of turpentine.

Mr. Watson has used it, through the suggestion of Sir B. C. Brodie, in a dangerous case of epistaxis, that had baffled every remedy for several days, but whether the benefit procured was attributable to the styptic, the time that had elapsed, or from its being last employed, he would not take upon himself to determine, but such were the facts.

Mr. King considered its power depended on its simplicity, for he was fully convinced that we frequently met with disappointment, from the styptics generally employed being too potent; for, after the failure of strong acids, he had frequently seen vinegar and water speedily put a stop to the discharge.

The hæmorrhagic discourse having subsided from exhaustion, when, like nature, capricious in her actions, from a subject that had a tendency to produce calmness, nay even death, the spark of life was aroused into hysterical convulsions, through the recitation of a case that Dr. Johnson had visited at 5 P.M. this day. The subject of the case was a young lady, who had been disappointed in love. She would suddenly fall into a state that apparently

closely approximated to death, but on the slightest touch, even with the point of a finger, she would be thrown into the most violent and distressing convulsions. In this almost lifeless state she would remain for several days without partaking of any nourishment; the present inactive condition had lasted upwards of thirty-six hours. Suddenly animation would return, she would dress herself, laugh and talk, take some refreshment, ask for her medicine, which was composed of the most disagreeable ingredients, such as assafoetida, camphor, &c., and then, perhaps, would as suddenly experience (query, produce?) a relapse. Every means that possibly could be thought of have been tried, without deriving the least benefit. Dr. Johnson recommended her friends to have recourse to no further treatment, but wait patiently, as he believed a suitable marriage would be found to prove the best remedy.

A member recommended for hysterical affections, during the paroxysms, cramming the mouth with common salt; from the good effects arising from its use in these, not unfrequently feigned cases, he had been induced to try it on a poor lad, whom he found lying on the floor in a state of insensibility, from a severe beating which he had received over the head. The salt had no sooner been administered than the poor lad started up, and walked away perfectly recovered. The gentleman said he would not take upon himself to explain its *modus operandi*.

Mr. Toynebee said that he had lately witnessed its power in recovering a dog, of the Newfoundland species, where the poor animal had suddenly fallen down in a state of insensibility; a groom who had called for the salt, although aware of its efficacy, was ignorant of its action.

Mr. Mart considered that its *modus operandi* depended on the sudden shock it communicated to the system; from practising in the navy he had often had occasion to behold the good effects derivable from sudden shocks, as not unfrequently the sufferers would inadvertently fall overboard, the result was an immediate return of consciousness and recovery. However, he considered Jack Tar had a better and a more effectual remedy than salt, and that was dashing a well-soaked mop against the glutens.

Mr. King advised pouring boiling water, sufficiently heated to destroy the epidermis, in preference to dashing, from a height, cold water to arouse the *vis vite*, whether the insensibility was dependent (we believe) on a physical or accidental cause; if the former, and especially if the insensibility arose from the brain being either functionally disordered through sympathy, or organically diseased, we should much question the propriety of this treatment.

The Society then adjourned, Mr. Strettor having promised, by the request of the members, to bring forward at the next meeting the subject of small-pox for discussion, Mr. S.

having made some valuable remarks on the subject at the hour of adjournment.

LONDON MEDICAL SOCIETY.

Monday, March 23rd, 1835.

Dr. WHITING, President, in the Chair.

The case of calculus, related by Mr. Stevens at the Society's last meeting, having created considerable interest, it led Mr. Clifton to collect further particulars, when he found that a female patient had been operated on by Mr. Stanley at St. Bartholomew's Hospital in August last, and from various coincidences he did not doubt but that it was the same individual, but regretted that Mr. Stevens was not present to corroborate it. From the irritability of the urethra it was found impracticable to use Weiss's dilator, therefore a valvular incision was made, and a calculus extracted (query, size, composition?), which in part crumbled under the forceps, from the nucleus being composed of matted hair*. The calculus is preserved in the Museum belonging to the hospital. After the patient left the establishment she was visited by Mr. Stanley, and the incontinence of urine was found dependent on the formation of a second large calculus, which she refused to have removed, and then this surgeon withdrew his attendance.

Mr. Headland submitted to the members some questions respecting the beneficial and prejudicial effects arising from persons accustoming themselves to the habitual use of opium. Some lengthy remarks were made by the mover of the subject, which have long since been offered by authors who have endeavoured to elicit information on this important topic, therefore we shall confine ourselves to what Mr. H. considered as practical facts, that he had obtained from paying no small attention to it for the last eight or ten years. Mr. H. had arrived at the conclusion, like most others, that opium taken in small quantities, for however long a period, does not tend to shorten human existence, on the contrary if taken to excess. By bringing the subject before the profession he flattered himself he should be able to obtain for the habitual opium consumers, the quantity considered, an equal right to accomplish the insurance of their lives, as well as those individuals who are in the habit of taking half a pint to a bottle of wine daily, as he regarded the practice pretty much one and the same thing. For in all insurance documents it was stated, that information was requested on this point, and of course whether the quantity taken proves either beneficial or injurious, it invalidates the applicant.

Mr. Headland had attended a wealthy gen-

* It still remains a query how the hair go into the bladder.—*REP.*

tleman since 1828 to the time of his death, which lately took place, *ætat.* 35, who appeared fully 50 years old, he was subject to rheumatism, and at the time of his first being consulted the patient was taking daily an ounce of Battley's liquor opii sedativus. The sufferer was fully conscious of the ravages the bad custom produced on his system, and to cut short his miserable existence he resolved to put an end to it. With this intention he placed himself by the brink of a rivulet, and swallowed a full tumbler of the preparation. The increased quantity, to the patient's surprise, lengthened the stage of exhilaration, and consequently shortened the depressing or suffering stage. Being foiled in his attempt of committing double suicide, by the combined powers of poisoning and drowning (the first that we remember having met with, where both powers bid fair to work their destructive influence at the same time), he returned home, continued the mal-practice in spite of Mr. H.'s remonstrances. However he prevailed upon him to substitute the acetate of morphia; the first day he took only one grain of this salt three times in the course of the day, without experiencing any effect; next day six grains; third day twelve grains, the latter quantity however he could not bear. Within the last year and three-quarters of the patient's life he consumed one pound, two ounces, and odd grains of the acetate of morphia, a quantity Mr. H. believed had not its parallel. The symptoms that he would particularly call the attention of the Society to, were a prominent eye and contracted pupil, and, after death, to the accumulations of fat that were found adhering to the cellular tissue, so much so that he had observed in a patient, who had laboured under an ulcerated womb, which caused the total destruction of that organ, the intestines were found buoyed up in their natural position by an immense lump of fat. This lady, to obtain ease and sleep, had accustomed herself for a length of time to very large doses of the drug. The other symptoms that he had remarked were difficult respiration, a trembling pulse, constant loss of appetite, and vomiting; the latter he attributed to a regurgitation of bile, and the loss of appetite to a suspended action of the absorbent vessels. Mr. Headland had attempted to effect the insurance of his patient's life at several offices in this metropolis without avail.

In answer to a question from Mr. Dendy, Mr. H. replied that the sexual propensities were entirely annihilated, and his patient had never been married.

Mr. Whitehead remarked, that he had had a pauper patient, but he proved a very expensive one to the establishment where he applied for assistance, as he took ʒj. of pure opium daily, who attained the age of 64 years, but did not affect his procreative powers, nor did Mr. W. believe that opium tended to shorten life.

Dr. Johnson believed that Mr. Headland

laboured under a great mistake with respect to information being required by the directors of the insurance offices, whether the applicants were in the habit of taking opium, for he had been physician to an office now eleven years, and he had never heard of it. But, on the contrary, if an individual took it for the relief of any neuralgic or stomach affection it would tend to lengthen instead of shorten, by improving his life;—so much for the medico-legal question. As to the physiological one he could not agree, but considered it to arise from the same cause that affected habitual drunkards, who scarcely ever failed to vomit up the contents of the stomach, after the excitement, produced by the stimuli, was gone off; and as to persons becoming fat, that was quite in opposition to his experience.

Mr. Headland replied, that he considered himself supported by the case of some great person in Scotland, who had insured his life, where the directors refused to make good the demand on them, from his life being shortened through his indulgence in opium, and further explained that the fact was not suspected during life, for they evidently appeared emaciated, which was corroborated by finding after death all the muscles of the body considerably wasted, which appeared paradoxical, but so he had proved it.

A gentleman requested to know if Mr. Headland did not allude to the Earl of Mar's case, which was answered in the affirmative; then the inquirer begged to correct the Secretary. For in the civil suit, regarding Lord Mar's insurances, the insurance company was found not entitled to refuse payment, on the grounds that the directors did not make sufficient inquiry into his Lordship's habits, the habit having been contracted prior to the insurance being effected. The gentleman further stated, that, having made various experiments with opium for some years past, he perfectly agreed with Dr. Johnson that opium produced emaciation, nor had he found that those persons, who had broken themselves of the habit, while in the prime of life, regained their flesh, therefore he considered Mr. H.'s two cases as exceptions.

The President, in announcing the termination of the discussion, related the case of the Rev. — Hall, a most eloquent and popular preacher, who for many years habituated himself to the use of two ounces of laudanum daily, which produced a liveliness in his discourse that all his hearers admired, without inducing the least unpleasant feelings, or proving prejudicial to his health.

EFFECTUAL CASE OF TRANSFUSION.

THE life of a poor woman, wife of a labouring man, at Clare, was lately saved, when in the last stage of exhaustion after confinement of her tenth child, by infusing a portion of blood from the arm of her husband into his apparently lifeless partner. She is now doing well.

THE

London Medical and Surgical Journal.

Saturday, March 28, 1835.

COMMENTS ON THE BRENCHELEY CASE
OF LITHOTOMY, NEW IN THE
ANNALS OF ENGLISH SURGERY.

THE Brenchley case of lithotomy (so called), the leading features of which we recounted in a late number, has excited a more than common share of both public and professional attention. The question, bearing upon the right of forcibly operating upon an adult and sane individual, has been freely canvassed, and the professional acumen of our brethren directed to a novel, and we hope never-to-be repeated, point for discussion.

Of course, among the number who have considered this subject differences of opinion on it may be expected, and accordingly, among those with whom we have communicated, a very diminutive minority have advocated a most limited exercise, in certain cases, of the abhorrent system, while the grand majority have held the negative position, and in the most unqualified terms denounced it altogether. Among the public the general feeling seems to be, that surgical operations, inflicted by means of coercion and personal violence, are to the last degree to be condemned, and that the objection holds with double force when intrigue, or jealousy, has been instrumental in the flagitious transaction; that they will, if tolerated, lead finally to most lamentable consequences, and encourage a system of wholesale cutting into human flesh, where disease is present, which will be bounded by no other responsibility than that of a few, often in country localities *brutalised*, beings, invested with parish authority. This some may pronounce to be an ex-

treme conclusion, which the intellectuality of the age will not permit to be perpetrated. But there is danger, nevertheless, when the liberty of the subject is concerned, that an abuse against it, left unpunished, or without severe animadversion, may in proportion to its impunity grow to a more serious extent.

Taking this view of the subject, we propose examining the circumstances which may allow of — palliate, or seem to palliate, the recourse to forcible means in surgical operations. The laws, either statute or common, will not afford us much assistance in the execution of our purpose.

The most obvious instance, in which coercion *in an operation* may be tolerated, seems to be when insanity is produced by some cause removable by the surgeon's art, or when some accident occurs which places the patient's life in immediate danger. In either of these cases the party is so placed that his presence of mind is gone, and his intreaties, or resolves, should not be so much consulted, or have that weight in restraining others in their exertions in his favour, which, under other circumstances, they might be allowed to have. It seems but reasonable, and therefore (should be) lawful, that in such cases help should be afforded even against the patient's will.

Infants again, as far as the mental power is concerned, are deemed incapable of judging, and therefore it is lawful that their *immediate* guardians should have the power of determining for them, and enforcing submission where it is for their benefit to undergo a surgical operation; but there are shades of distinction in these cases: such as when the supposed cause of insanity (be it a tumour or other removeable substance pressing upon the sensorium) is but indistinctly made out,

and the operation might, from the imperfect diagnosis, produce no effect, or a bad one; if the doubt were great the operation would be unwarrantable, and should be accordingly punishable. In infants, subject to the controul of guardians, parents, or otherwise, no operation should be esteemed legal, unless sanctioned by a consultation of qualified medical men,—reasons start up on every side to render this caution advisable.

Again, passing over those emergencies, which involve life at a moment's warning, such as the wounds of any great artery, the bursting of a large aneurism, or violent discharge of blood in any way; a secondary grade of accidents is liable to occur, such as fractures, dislocations, and greater or lesser lesions of the flesh, not including the larger vessels. In these, the mental strength of the sufferer remaining, his wishes ought undoubtedly to be consulted, and nothing should be done for his relief against his inclination, that sacredness of the person, which the ancient Saxon laws insured, but which was in a great degree destroyed by the brigandage of the Normans, should be strictly respected. But if a man rather choose to die than submit to have his wounds dressed (we consider a self-immolator to be always insane), the saneness of his mind, we think, might be fairly impugned. It then might be a question, whether or not, after delaying to the last serviceable moment, the cure might not be attempted under so much restraint as was absolutely necessary. In all these cases the surgeon should be held responsible *quoad* the necessity and performance of the operation, or there would be no safety against the reckless daring of ignorant pretenders, or the stupid ambition of such as covet the fame of being esteemed *clever* operators, forgetting that the use of the

knife in surgery is one of its opprobria, and that it becomes disgraceful and even criminal, in an immeasurable degree; when used unnecessarily.

Having now considered the circumstances under which, if at all, coercion might appear defensible, we come to those in which its exercise is not only illegal, but militates against the universal opinion of mankind, and gives a shock to one of our best feelings, that of self-respect. Of this class, we are of opinion, are complaints of a chronic nature, whether slowly and inappreciably undermining the powers of life, or progressing with a quicker step; for the question in these, is not one of immediately vital importance, but whether the patient be willing to suffer more or less evil for an indefinite time. There is no reason why he should not use his own discretion here. In other concerns of life, as important as that under review, a man is left to choose his amount of good or evil as seems fit to him, and the same measure of indulgence might, without harm to the state, be conceded to him where bodily infirmity is the object. In fact, the guiding of all that regards his health is a right inherent in him; it is a right which even savages respect. It is that portion of his personal liberty which his relation to the social community in which he moves ought not in any degree to affect,—never to cause him to forfeit, unless stricken with madness.

To enumerate the instances in which this discretion should be allowed would be tedious, if not impossible; but we may safely include among them that in which a violent, and, as the verdict of a jury upon the case proves, an illegal degree of coercion was practised at Brencley upon the pauper boy, an inmate of the workhouse there. As lovers of justice, we must say that we feel gratified that

the jury have decided it to be illegal to drag a man gifted with his senses into an operating-room, to be cut and divided as seemed fit to interested parties. We say we rejoice in the verdict of the jury who tried the case—they have shown themselves *independent* men. For is it to be endured in this civilised country, that a being possessed of his judgment and able to use it should be dragged up to an operating table, hurled down, and then held upon it by the united strength of four ruffians, while the knife was applied by a fifth to his flesh?

“*Ferrum idem quod olim vulnus flebile fecerat.*”

Is it to be borne that while the fear-struck patient was clinging to the door-posts of the—to him, *Golgotha*—and appealing for mercy, his answer should be the rude grasp of a merciless band, resolved to overpower and compel him to submit to the laceration of his body whether he would or not?—A jury has said, No! and we re-echo the verdict, repudiate *such* surgery, and hope that the brand “guilty,” stamped upon one of its perpetrators, will act as a warning to future intriguers in the operating way. We trust to hear no more of quackish-minded parsons forsaking their proper avocations to attempt what they are incapable of, and, owing to their imbecility, condemned to flounder afterwards in a legal *hot-bath*. We devoutly hope to hear no more of *curling-iron forceps*, even though *flattened* at the ends by an ingenious *jobbing* blaeksmith; and finally leave the parties concerned in the outrage, convicted, or not convicted, to reflect on what might have been the verdict of a jury if death had ensued, as it was likely to do from the united effect of the *operation*, and the inflammation caused by the *excitement* produced by their rough usage.

PRIVILEGES OF SURGEONS, AND LICENTIATES OF APOTHECARIES' HALL.

FROM a correspondence between the Poor Law Commissioners and a Mr. John H. Barnett, of Farringdon, Berks, it appears that in that district one of the Assistant Poor Law Commissioners (Mr. Gulson) decided that no medical practitioner, not being a Member of the College of Surgeons in London, should be permitted to contract for attendance on the poor. Mr. Barnett, who is only a Licentiate of the Apothecaries' Company in the said town, resisted this dictum successfully, and, after some correspondence with the Poor Law Commissioners, obtained from them an acknowledgement of that privilege which never should have been impugned. The spirited conduct of Mr. Barnett in the affair has placed Licentiates of the Apothecaries' Company equally eligible with Members of the London College of Surgeons, so far as respects the attendance upon parish paupers.

Upon this triumph of Mr. Barnett, which was a just one, our contemporary the *Lancet* remarks—“In removing the objection of which Mr. Barnett complains, that gentleman may imagine, possibly, that the Commissioners have rendered justice to medical practitioners generally throughout England and Wales, but they will soon hear to the contrary from those practitioners who belong neither to the College of Surgeons in London nor to the Apothecaries' Company in Bridge-street.”

Now, if by the practitioners who neither “belong to the College of Surgeons in London, nor the Apothecaries' Company in Bridge-street,” the *Lancet* means such as are possessed of no diploma or licence from *any* accredited source, but who are entitled to practise from having done so

prior to 1815, we say they must be old hands, and not so fit for parish contracts as their younger and, *we must say it, better* qualified brethren. If such of the above are meant as have bought a bit of paper, called a *Diploma*, at the *London College of Medicine*, situated No. 9, Lancaster-place, Strand, for the magnificent sum of four guineas, we cannot say we pity their exclusion from the parish loaves and fishes, meagre as they are. But if such as practise without the Diplomas or Licences of the London College of Surgeons or Hall of Apothecaries, but yet possess licences from accredited sources, are included, we do not believe that the ban of exclusion will be enforced against *them*.

With respect to the first two classes, we consider them of the same calibre, since the only qualification required in the first to obtain the four guinea bit of paper of the second, is that they be *practitioners of any sort*,—a cow-leech having been in practice before 1815, and drugged a few patients to repose, would be eligible. The august humbug carried on at the London College of Medicine, under the Protean forms of Senate, Provisional Senate, &c., passes, without damage of brains, all such as wish, at the stipulated price, to wear its four guinea honours; in fact, the business may be done at any time through the intervention of a twopenny-post letter (vide the cover of the *Lancet*), only taking especial care to pay postage and enclose an order for the four indispensables.

Often of yore has the *Lancet* denounced, with apparently measureless wrath, the cut and dried system of diploma-granting, carried on at Aberdeen and other places; often has its *virtuous* phial of indignation been poured out against all corruption; and at one

time, when business was slack, every thing seemed to its eyes puriform. Its red-hot endeavours were to cauterise without mercy: witness the camp pitched by a few of its trusty retainers in the locality mentioned, No. 9. This was intended to crush that "father of corruption," the College of Surgeons in London. A Treasurer (be sure of it), a Secretary, with six letters of the alphabet after his lengthy name, a Senate, and a Provisional Senate, (*hæc caveto Romane!*) were elected, or, more truly, stood on tip-toe self-elected, and looking out sharply from certain parlour windows every Tuesday evening for customers.

The *Lancet* lauded the affair to the skies, and in glee prophesied by its means the speedy demolition of the "pestilence at Lincoln's-Inn Fields;" but the fulfilment of that memorable prophecy, like that of many others, is not yet come. The College of Surgeons stands where it did, and so does the *College* of No. 9.

We have, however, in some degree digressed, and must return to our subject. All we intended to convey by what we have said, was, that the said College of Medicine having no right to sell or grant degrees of any kind, its members, (God help them!) if there be any, are in no better condition than their *unpapered* brethren—they of the unlettered ilk before 1815.

Thus far we have gone into the subject because we shrewdly suspected when our contemporary stood not up when the question of a charter for the London University was moved, that something of this kind stuck in his throat, and prevented his uttering a syllable against a monopoly similar to, but more thriving than, that of No 9; we say similar, because jobbing and trafficking in degrees were at the bottom of both, and promises of future incorporations and power blazed alike from

the pigmy of Lancaster-place, and the dome-capped giant of Gower-street,—“*Arcades ambo*”—but their singing is spoilt!

After this preliminary we proceed to avow that we differ widely from the *Lancet* in its ideas of justice, so far as respects the admission of unlicensed practitioners into official situations. We hold that nothing can be more just or fair than to appropriate to the well-educated practitioner his undoubted right—that of taking precedence of such as pretend to understand intuitively, as many blacksmiths, farriers, &c., in different parts of the country pretend to do, an art for the attainment of which he has paid and studied deeply. We aver that if there be any office of profit to be filled by a medical man, the bearer should be properly qualified, and possess vouchers for the same; for is it reasonable that one who has perhaps never spent a shilling in his education, should rank with, much less take precedence of, another whose career of education has dived far into his finances? We opine not; besides, those who practised before 1815 have had sufficient time to put their house (brains?) in order, and to qualify themselves, if so inclined, as the law demanded. They would then have become on a par with their *qualified* brethren, instead of continuing to practise under a miserable subterfuge; and if they have neglected, as they *have for good reasons*, to do *this*, is it fair they should expect to rank with such as have undergone the toil, the expense, the anxiety inseparable from such qualification?—No: it is not for such as have taken advantage of this remissness in the law to beard those who have conscientiously complied with what the institutions appointed to guard the profession required.

Foreign Medicine.

Treatment by Carbonic Acid Gas in Amenorrhœa and the Uterine Pains which precede and accompany Menstruation.

BY M. LE PROFESSEUR MOJON.

It is well known that females in general, without being attacked by complete amenorrhœa, suffer great pain both immediately before and during menstruation. Various medicaments have been tried in remedy of this suffering, many of which increase it by over excitation of the nerves. M. Mojon proposes, therefore, the use of carbonic acid gas, which he considers an excellent antiphlogistic, in opposition to a great number of medical practitioners, who regard it as a stimulant. Fumigations of this gas may be also advantageously employed in cystitis, ophthalmia, and other local inflammations. This therapeutic agent not only acts on the blood in diminishing its thickness, but also on the solids in relaxing the fibrous system to prostration and torpor.

The gas is disengaged from calcareous carbonate by means of weakened hydro-chlorine acid, and must be conveyed into the vagina through the orifice of an Indian-rubber pipe. These fumigations should be repeated twice a-day before menstruation, and they are found not only to regulate the course, but entirely to relieve the pains which precede, accompany, and follow menstruation. The operation may be hastened with the ordinary apparatus, by the addition of a spigoted bladder, filled with the gas and adjusted over the Indian-rubber pipe, the spigot being turned, a slight pressure on the bladder throws a current of gas into the vagina.

British Hospital Reports.

ST. GEORGE'S HOSPITAL.

Chronic Inflammation, with thickening of the Bladder.

John —, æt. 40, was admitted into this hospital December 1834. He had laboured under a stricture of the urethra for 20 years. When admitted the smallest catgut bougie could not be passed. There was a hard cartilaginous tumour, inclosing a cavity in the perinæum. The urine was abundant, pale, and highly alkaline: it contained a peculiar mucus, resembling a powdery matter, which slightly floated in it, and was intermediate in appearance between mucus and albumen. On applying heat, or adding nitric acid to the urine, its coagulation proved the presence of albumen. There was slight occasional pain in the loins, which, on several occasions, was mitigated or temporarily relieved by a blister.

Instruments were gradually passed through the stricture, but not into the bladder, their point being obstructed by what appeared to

be an abscess in the prostate gland. The latter conjecture was supported by the circumstance, that a great deal of pus was evacuated separately from, and before the urine, the passage of which it occasionally obstructed. The progress was so far calculated to give encouragement, when a train of symptoms was established, which Mr. Hawkins has described with vigour and correctness. We shall venture to extract the description, and the commentary added by the lecturer.

"You have seen Weighell very nearly dying of a sudden increase of renal disease, to a return of which he is still liable at any time. It was in January last that he became low-spirited and out of health; then he had occasional rigors, pain in the back and groins, with more difficulty in making water; then in a few days he had a great quantity of blood in the water, which came suddenly, and continued for two or three days, and before it ceased there came away with the urine a very large quantity of pus, which continued for some little time, and then ceased. While he was at the worst, he lay in a state of listless half stupor, with a quick, feeble, intermitting pulse, and the brown tongue of typhus fever; and he had occasional delirium, and was frequently crying from extreme depression of mind, when not asleep and stupid. These symptoms continued, more or less, for nearly a month, when he began to revive and recover strength; and the symptoms I have mentioned, both local and constitutional, and as connected with the urine, gradually went away, and left him as you now see him.

"Now, what I believe to have happened during this time, was the formation and bursting of an abscess in one kidney, and that probably the right, from an affection of respiration, with pain on that side, which he laboured under for a few days. The discharge of pus from the kidney occurs in three different states. First, a quantity is secreted from the tubular structure of the kidney, and from the infundibula and pelvis, without any cavity like that of an abscess, and while the cortical substance is only inflamed. I have seen this discharge take place suddenly, and to the amount of many ounces daily; so that it seemed almost impossible that it could have happened from the secretion from a mucous surface only; and yet dissection has shown that it did so. 2ndly, you find small quantities of pus partially confined in cysts, consisting of the infundibula and tubes, enlarged and dilated, these cysts communicating with the excretory tubes. Thirdly, you find circumscribed abscesses in the kidney not communicating with the excretory tubes; even these, however, you can often trace to the commencement of the tubes, where a drop or two of pus, confined by adhesive inflammation, becomes the origin of larger collections of matter.

"I judge that Weighell had a circumscribed abscess, from the rigors, and so on, preceding the purulent discharge, and because there was

also a large quantity of blood before the pus, as if the wall of an abscess had been ruptured to give exit to its contents. If I am right on this point, the abscess has since probably filled up."

The treatment employed during this condition of stupor were stimulants of course, a blister to the right side, and a blister, also, to the nape of the neck.

The sequel of the case may be briefly stated. The patient became gradually reduced in strength, emaciation made progress, and about 20th June he was attacked with diarrhoea, attended with much general pain in the abdomen. He died 6th of July, having suffered for a day or two from pain in the head, unaccompanied, however, with actual stupor. During the period that elapsed between the comatose attack and his death, the urethral symptoms continued nearly stationary. The suppuration from the abscess that was thought to exist in the prostate was diminished, and the cartilaginous tumour in the perinaeum had increased. A catheter was occasionally passed.

Dissection.—The cartilaginous tumour in the perinaeum was placed anterior to the stricture, and contained a small abscess, communicating with the urethra. The stricture itself was broad and firm, white in appearance, and situated rather on the left side of the urethra. A catheter of tolerable size could be passed through it. The prostate gland contained an abscess, capable of holding a tablespoonful of pus. At the side of the verumontanum was an opening into the abscess, in which the extremity of the catheter had frequently been involved. The bladder was thickened to the extent of more than half an inch—its muscular fibres were prominent and enlarged, and its mucous membrane dark-coloured, vascular, and folded into numerous little pouches. The ureters, the pelves of the kidneys, especially the left, and the infundibula, were in some degree enlarged, and their mucous membrane was inflamed. The secreting structure of both kidneys was condensed, and of a yellow colour; the left, which was nearly of its natural size, was more vascular and brittle than the right, which was diminished to half its natural bulk.

The chain of consequences resulting from the stricture of the urethra, and the lodgment of urine in the bladder, in the ureters, and in the pelves of the kidneys, are obvious even to the inexperienced pathologist. Perhaps it may be briefly, though not quite correctly, summed in the expression, that chronic inflammation was induced in all the portions of the urinary apparatus affected by the urinary accumulation. The case is interesting, because it informs us what we may expect, and what we should avoid. Mr. Hawkins judiciously dwells upon the circumstance, that pus may be secreted from the mucous membrane of the kidney, in a manner and to a degree which might reasonably warrant the suspicion of a circumscribed abscess in that organ.

WESTMINSTER HOSPITAL.

Anomalous Eruption.

TIMOTHY HOLLAND, ætät 33, a native of Ireland, was admitted, Dec. 9, 1834, under Mr. Guthrie, into Burdett Ward. He became an in-patient of the hospital, on account of a squamous eruption affecting the face and extremities, more especially the left thigh and leg, the body being perfectly free. The patches on the extremities are completely circular, varying in size from a half-crown piece to near that of the palm of the hand, are situated principally on the outside of the limb, considerably elevated above the surface, with a slight areola of inflammation. Those on the face do not assume any regular form, nor do they affect any particular part. His health is much affected; he appears to be of the cachectic habit of body, much debilitated, with a small and weak pulse; the body exhales a most unpleasant acid odour; features indicative of anxiety and depression, and he complains of constant and severe pain in the diseased parts. He is about the middle height, of the leuco-phlegmatic temperament, not married.

The account he gives of himself is as follows:—He has never had syphilis or gonorrhœa, and he cannot assign any cause for the complaint. It first showed itself when he was thirteen years old, and he generally but not always has an attack once in the year. It first invaded the extremities, but afterwards affected the face; he has never had any spots on the body, nor, until the last attack, on any other part but those already mentioned; during the illness previous to that under which he at present labours, one or two vesicles appeared on the prepuce, and which scaled like the disease of the extremities. It is difficult to ascertain from him whether the complaint commenced by a vesicle, pustule, or tubercle, as he at different times describes the whole three as the primary affection: it would appear, however, to be at first vesicular. His present complaint commenced six weeks ago.

Previous to an attack the general health is disordered for a week or two, marked by inappetence, emaciation, general debility and listlessness, derangement of the stomach and bowels, furred tongue, &c. His history gives no evidence of a syphilitic origin, which the circular appearance of the disease on the extremities would appear to indicate. He has been treated for this affection in the Cork Hospital, at Guy's, at the Charles-street Dispensary, and elsewhere; in one place salivation has been caused, mild antiphlogistic treatment has been adopted in another, and each with the effect of removing the disease, but not of preventing a relapse.

He was ordered a warm bath every night, poultices to the extremities, and the diaphoretic mixture internally.

The poultices removed the scabs, when large circular ulcers, not extending deeper than the integuments, and of a perfectly regular surface,

were exposed; the inflammatory areola encircling these ulcers was larger than before. Some of these were ordered to be dressed with an ointment containing ʒj. of the dregs of yellow wash to ʒj. of simple cerate; this application proved too irritating, even when diminished one-half; the poultices were, therefore, to be resumed, those which had been poulticed throughout looking better. A point worthy of notice was the manner in which these ulcers enlarged; an inflammatory areola preceded, then the cuticle became raised, with a little serum deposited between it and the cutis, and, finally, ulceration attacked the part, while points of cicatrisation might be seen in the centre.

Dry lint was afterwards applied to these ulcers, the cupri sulphas being occasionally had recourse to; the general health improved somewhat, the appetite being greater, the pulse acquiring more volume and power, and the man gaining strength and flesh, but still having the cachectic cast of countenance. Under this plan the ulcers healed, and some of the scabs on the face fell, leaving a red, but smooth and unbroken surface.

Jan. 31st. The scabs on the face are more numerous than they were, but there are several spots where they have been spontaneously detached; the extremities are clear.—Ordered to continue the warm bath, and to omit the diaphoretic mixture.

R. Extr. sarsæ, ʒj.

Decoct. sarsæ, c. O iss., solve.—Sumat æger 4tam partem bis in die.

Feb. 5th. Has commenced taking the sarsaparilla.

14th. He says that he is nearly free from pain, and has been much easier for some time; he experienced relief soon after he commenced the sarsaparilla; the scabs have separated from almost every part of the face, leaving an unbroken surface beneath, quite healthy, but rather reddish. His general health is much improved, and his spirits proportionally raised. The outer half of each supercilium has been destroyed by the disease.

21st. Has continued to improve since the last report; the parts from which the scabs have been detached are perfectly sound, and there are very few any where.

March 1st. Is quite free from any traces of his complaint; is getting fat and strong; has continued to take the sarsaparilla, and to use a warm bath nightly.—Discharged on the 17th.

This case is headed "*anomalous eruption*," inasmuch as it remained doubtful to what cause it should be attributed, and also its real nature was not satisfactorily settled. Some of the surgeons regarded it as pure syphilis, an opinion which the circular character of the sores seemed to support. Several medical gentlemen of the sister kingdom who saw the case, considered it to be of the same nature with a disease peculiar to, and common in, Ireland, called *sivens*, dependent on a cachectic habit of body.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, March 19th, 1835:—Robert Geo. Higgins, Newport, Salop; George Augustus Place, Hampteston, Dorset; Wm. Whitcombe, Cleobury, Mortimer; Henry Rich. Gawin Tripe, Plymouth; William Mackie, Oundle.

MISCELLANY OF FACTS.

Curious Instance of Gratitude.—The Treasurer of the County of Antrim Infirmary has received, for the use of that institution, the sum of £20, with the following letter, from William Stewart, Esq. M.D.:—"My dear Sir,—I have great pleasure in forwarding to you, as treasurer, a sum of money, presented to me for the funds of the County of Antrim Infirmary, under the following circumstances. On Sunday last, my servant told me that a man and woman, who were in the hall, wished to speak to me. On going down, they appeared of that class of people who seek for gratuitous medical advice. The female then said, I wish, sir, to talk to you in private. On my going into the parlour, she asked me if I recollected having ever seen her. I told her not. She then spoke to the following effect. Upwards of sixteen years since I was a patient in the infirmary, for extensive ulcers on my leg, and asked you if you thought they could be cured and you said it was quite doubtful. In despair I went to the summer house in the garden, fell on my knees, prayed to God to bless your endeavours, and vowed to him, if I got well, and if ever it were in my power, I would give something to the infirmary. My leg was healed, and is now quite well, and I never forgot my vow. About six years since I had the sum I am now going to give you made up, but was obliged to use it for other purposes. I am now, thank God, enabled to fulfil my promise, and beg of you to give these twenty pounds to the Treasurer, and am sorry it will only produce one pound a-year. On my pointing out to her that, from her appearance, I suspected she could not afford to give so much, she replied that she could do it, that she kept a small shop, and that her family could support themselves by their trades; and said, I now feel satisfied in having fulfilled my vow to God.—I am sorry to state there are few persons that would have been so thoughtful to the institution. I remain, &c.

"Wm. Stewart, Surgeon, &c.

"Lisburn, March 6.

"To Edw. Johnson, Esq., Ballymacash."

Mr. H. Deny is, we understand, during the ensuing summer, about to give a Course of Lectures on the Causes and Treatment of Diseases of the Skin in Children. This is the first time this has been made a special subject in this country, and heartily do we wish Mr. Deny success in his undertaking.

His Grace the Duke of Wellington has consented to become President of the Eastern Dispensary, Great Alie-street, Goodman's-fields, and accompanied his acceptance with a munificent donation of £100 toward the funds of the institution.

APPOINTMENTS.

Military.—Assistant-Surgeon A. Shanks, M.D., from the 82nd reg. to be surgeon of the 55th Foot, vice Campbell, appointed to the 93rd reg. Surg. J. Campbell, M.D., from the 55th reg. to be surgeon of the 93rd Foot, vice E. Bush, who retires upon half-pay. The half-pay of Assistant-Surg. A. Lusignan, of the Canadian Voltigeurs, has been cancelled from the 1st March, 1835, he having accepted a commuted allowance for his commission. Mr. Seaton, surgeon of the Royal Artillery at Portsmouth, ordered on the Medical Staff in Canada.

DEATHS.

Mr. Benjamin Carr, of Knaresborough, surgeon, in a fit of apoplexy while taking tea. Dr. Theodore Waterhouse, of Liverpool, one of the physicians to the Northern Hospital in that town. In Edinburgh, Mr. Samuel Williamson, formerly of the East India Company's medical service. Mr. Henry Garbett, of Hereford, surgeon. At Charlsetown, Nevis, Mr. Samuel Fitzherbert Bowden, surgeon, formerly of Bath. Mr. James Ackell, of Cheltenham, surgeon. Mr. John Turner, surgeon, of Shelly Bank, near Huddersfield.

WEEKLY BILL OF MORTALITY.

London, Tuesday, March 24th, 1835.

Abcess	1	Gout	4
Age and Debility	54	Heart, Diseased	3
Apoplexy	8	Hooping-Cough	23
Asthma	37	Inflammation	58
Cancer	1	Inflammation of the	
Childbirth	12	Bowels & Stomach	5
Consumption	80	Inflammation of the	
Constipation of the		Brain	3
Bowels	1	Inflammation of the	
Convulsions	47	Lungs and Pleura	6
Dentition, or Teeth-		Liver, Diseased	23
ing	5	Measles	10
Diarrhœa	3	Mortification	1
Dropsy	19	Paralysis	3
Dropsy on the Brain	6	Small Pox	4
Dropsy on the Chest	1	Sore Throat & Quinsey	1
Fever	9	Thrush	1
Fever, Intermittent		Tomour	1
or Ague	1	Unknown Causes	17
Fever, Scarlet	11		
Fever, Typhus	1	Stillborn	21

Buried, Males 247 Females 241 Total 488

Increase in Burials reported this week, 99.

CORRESPONDENTS.

In answer to the inquiry of *Aristides*, we state that, both in our general observations and in our strictures on books received, we shall avoid zero and the boiling point, and neither have praised, nor shall praise, bad works, nor condemn good ones.

X. X.—His extract shall be inserted as soon as we have time to review the whole affair; our press of matter will prevent that taking place for some time.

Cantator.—The allusion to certain students in King's College, contained in his poem, we cannot in the present state of the singers' professional career notice; we intend hearing them on the coming Sunday, and if their execution be no better than the poetic strains of our correspondent, we may be tempted to give them, in our ensuing, a note or two on our double bass, which, although it may not harmonise with their treble, may perhaps appear to them somewhat counter.

Inquirer.—The child, if expelled with the membranes unbroken and placenta *en masse*, cannot in general preserve vitality longer than from two to three minutes.

Veritas.—The lectures of Dr. Roots and Elliotson will appear.

Cadwalader.—"Quain's Anatomy."

As to the practice of medicine, the Lectures of Dr. Stokes in this Journal far surpass any work published on that subject, except Dr. Mason Good's practice. The Surgical Dictionary of Samuel Cooper is a good substitute; his lectures, also given by us, are a good adjunct.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE V.

Case of suspected Thoracic Aneurism—Edema of left Arm and left Side of the Face—Probable Cause of—Relations of the left Vena Innominate to the Arch of the Aorta—Reasons for concluding that the Symptoms are produced by a solid Tumour—Its Effects explained—Another remarkable Case of Thoracic Tumour related—Case of violent and extensive Pulsation of the Heart depending on Cerebral Disease—Laennec's Error concerning the Indications for Bleeding—Case illustrative of—Use of Digitalis in such Cases—Case of Asthma, and treatment—St. John Long's Liniment—Dropsy treated by Opium—Acupuncture in Anasarca.

GENTLEMEN,—The object of clinical instruction being the study of diseases—their nature and their treatment, it is our duty to apply that study in the manner most likely to encourage the accumulation of practical knowledge. In accordance with this view, and in order to prepare you for the various emergencies that may hereafter demand the application of that knowledge, I shall proceed to select, from the cases at present in the house, such as, from their singularity, interest, or importance, seem to claim something more than a mere passing notice.

A man named James Byrne, who lies next the door in the chronic ward, and has been supposed to labour under aneurism of the thoracic aorta, leaves the hospital to-day. It is very probable, however, that he will hereafter be forced to return; for, whatever be the nature of his disease, it is incurable, and depends on some profound organic lesion. I would advise any gentleman, who has not attended to this very obscure case before, to take the opportunity of making an accurate examination of the patient during the short time he remains in the hospital.

While the phenomena of this case are still fresh in our minds, let us briefly discuss the question, whether this man really has aneurism of the thoracic aorta, and inquire whether there may not be some other cause to which his symptoms might be attributed with a more reasonable degree of probability. He was admitted on the 23rd of October, 1834, and had been in the hospital before for a considerable time. He states, that eighteen months previously to his last admission he was exposed to wet and cold, which produced a feverish attack, with symptoms of local inflammation in the lung, manifested by cough and difficulty of breathing. These were soon afterwards followed by dropsical swelling, and he applied at this hospital for relief. After remaining under treatment for about two months he began to improve and left the hospital, as he states, quite relieved. He enjoyed tolerably good health, and continued to work at his trade as a bricklayer until about five weeks before his last admission, when he was again attacked with cough and difficulty of breathing, accompanied by œdema of the left side of the chest and left arm. On examining him after his admission the following phenomena were observed:—The left side of the face and neck was slightly œdematous; the left external jugular vein with its immediate branches engorged and very prominent; the left arm and left side of the chest œdematous, and pitting on pressure; no affection of the bronchial mucous membrane, or parenchyma of the lungs, sufficient to account for the cough, can be detected by auscultation. Considerable dulness over the situation of the heart, and extending upwards over the sternal region on the left side; the right sternal region sounds clear and natural. The heart has not been removed from its normal situation; its pulsations can be felt over the ordinary extent, and no more, and they communicate a natural impulse to the finger. On applying the stethoscope over the heart its sounds were found to be regular and natural, but on placing it higher up, over that part of the sternal region which was dull on percussion, a loud *bruit de râpe* was heard.

Let us analyse these symptoms. In the first place, we found the anasarcaous swelling

occupying the left side of the chest and the corresponding arm, and in a slight degree the left side of the neck and face, accompanied by a turgid state of the jugular vein. Now, you may lay it down as a general rule, that where one side of the chest and the corresponding upper extremity is affected by anasarca, it proceeds from some cause residing in the chest. I have told you before that in all cases of dropsy, whether acute or chronic, whether accompanied by ascites or not, *when anasarcaous swelling appears in the trunk and upper extremities before it is observed in the abdomen or lower extremities, the dropsy in general is inflammatory, or, when not so and chronic, it proceeds from disease of some of the thoracic viscera*, and it is in the chest alone that we are to look for its cause and origin. Now, applying this rule to the present case, we are led to inquire, what is it that by pressing on the veins within the chest gives rise to engorgement of the superficial vessels on the left side of the neck, and to anasarcaous swelling of the left arm and left side of the chest. The pressure must, in our patient, be applied to a portion of the venous system, which carries blood from the left side of the head and the left upper extremity; in short, it must be applied to the great vein formed by the junction of the left subclavian and left jugulars. Now, this left *vena innominata sive vena brachio-cephalica* differs considerably from its fellow on the right side, which is very short, and nearly vertical in direction. The vein on the left side is three times longer, and directed transversely to the right, inclining, at the same time, downwards. It crosses behind the first bone of the sternum, lying in front of the three primary branches given off from the transverse portion of the arch of the aorta. You perceive, therefore, gentlemen, that it lies in a position most convenient to receive pressure in consequence of aneurism in any of these great vessels. This vein receives, before joining the cava, the internal mammary vein of the left side; you understand now why anything pressing on it is apt to produce engorgement of the superficial veins on the left side of the chest and trunk, together with œdema of these parts.

That we are not to look for the cause of the disease in the heart itself appears from various circumstances. The situation of that organ is not changed; its beating can be felt only over the usual extent of surface; it communicates a natural impulse to the finger; and when examined with the stethoscope its sounds are discovered to be normal and regular. Neither can we attribute the disease to any affection of the mucous lining or parenchyma of the lung; the only morbid sounds which can be detected in the respiratory organs being a few slight bronchial râles.

Now, it is sufficiently obvious, gentlemen, that the situation of the part which sounds dull on percussion would suggest the idea of aneurismal dilatation of the arch of the aorta,

or some of its immediate branches. But had dulness over so large a space of the chest, embracing nearly the whole left sternal region, been produced by aneurism of the aorta, or any of its branches, it is evident that the aneurismal sac must be very large. Where an aneurism gives rise to extensive dulness of the chest, you may be always certain that it has arrived at a very considerable size; for the dulness is caused by the immediate contiguity of the aneurismal sac to the parietes of the chest, and hence the dulness is always in proportion to the amount of lung displaced. When you applied your hand over the sac, in such a case as that which we are now considering, where the aneurism was of large size and closely applied to the parietes of the thorax, you would feel a very remarkable pulsation; your hand would be, as it were, lifted from the chest by each impulse communicated to the sac, and you would have palpable, unequivocal evidence of the cause of the dulness on percussion. Now, in the case before us, there was no such pulsation observed, whether we examined him while lying quietly in bed, or after he had walked briskly about for some time so as to excite the action of the heart and arterial system. Again, aneurismal sacs, as you are all aware of, before they produce extensive dulness of any portion of the parietes of the chest, point, as it were, in some particular situation, becoming distinctly prominent, and producing an eccentric motion around them, in consequence of the thoracic parietes being absorbed, or yielding at the point of greatest pressure.

From these circumstances considerable doubts have arisen in my mind as to the cause of this man's symptoms being connected with aneurismal disease of the great vessels of the thorax. I am rather inclined to attribute the *bruit de râpe* and dulness of sound on percussion to a lesion of a different character. Let us suppose that in this case a tumour has been developed in the cellular or glandular substances, situated in or towards the left side of the chest, occupying the anterior mediastinum, pushing back the lung and pressing on the large vessels connected with the base of the heart; what are the phenomena it would naturally present? First, we should have dulness of sound on percussion, corresponding in extent with that portion of the chest to which the tumour was applied; secondly, we should have *bruit de soufflet*, and probably *bruit de râpe*, in consequence of the pressure of the tumour on the aorta; thirdly, a tumour in this situation would necessarily compress some of the larger bronchial tubes, and thus give rise to cough and dyspœa. If a tumour presses on the trachea, or one of the larger bronchial tubes, why does it produce pulmonary irritation? Not by mere pressure on the part, for the pressure is applied so gradually, and with such a broad surface, that its effects could be scarcely felt; and it might go on to produce complete obliteration of the tube with-

out giving rise to any inflammation, if its action were limited exclusively to the part compressed. But it strangles as it were that portion of lung to which the tube belongs; a certain portion of a large bronchial tube is considerably narrowed by the pressure of the tumour, the free entrance and exit of air are impeded, and consequently that portion of the lung, which may be very large, is greatly deranged in its functions. Hence arises that sensation of distress, termed dyspnoea. Again, as soon as the free ingress and egress of air are prevented, we have not only the occurrence of dyspnoea, but also other effects equally referable to the same cause; the blood circulating through that part of the pulmonary tissue is imperfectly aerated and does not undergo the necessary change; the secretions and exhalations from that part are altered and unnatural, and consequently it becomes engorged, giving rise to irritation, cough, and expectoration. To understand this aright, you should bear in mind that this portion of the lung undergoes the same changes that the whole of the lungs undergoes in persons who are asphyxiated; that is, it becomes gorged with blood, for the moment that the black venous blood which is carried into the pulmonary tissue from the right side of the heart ceases to be properly aerated, that moment it stagnates in the lung, and soon renders it engorged. This is precisely the state of lungs which occur in the posterior portions of those organs in persons who die a lingering death, and which has most absurdly been termed the pneumonia of the dying.

But, to return to this man's case, I am inclined to think that the symptoms here present may with more colour of probability be attributed to the presence of a solid tumour developed within the chest, the nature of which I can only guess at, and that it is situated in the anterior mediastinum close to the origin of the aorta. Some of these tumours which have been discovered in the chest are of an adipose nature, some of them resemble the cerebral substance in colour and consistence, and others are like the steatomatous tumours formed in other parts of the body.

A few months ago, Surgeon Blackley was consulted about a young gentleman who had been gradually attacked with symptoms of pulmonary irritation, cough, and difficulty of breathing. The disease was supposed by some to be consumption, and a physician who had been in attendance thought it depended chiefly on derangement of the stomach. Mr. Blackley had his doubts with respect to both of these opinions and requested of me to visit and examine the patient. I could not detect any râles indicating the existence of tubercles, but over a large portion of the chest, and nearly corresponding with that part which sounds morbidly in the patient Byrne, there was dullness on percussion, the young gentleman had fits of cough and dyspnoea, and now and then difficulty of swallowing; a *bruit de soufflet* could be heard over the dull portion of the

chest, but the sounds and impulse of the heart were regular and natural. I expressed a very doubtful opinion of the case, but at the same time stated my belief that the case was not one of tubercular phthisis, of empyema, or of pneumonia, and I also said that it did not seem to be produced by disease of the heart itself. I dwelt especially on the existence of *bruit de soufflet* in the region which was dull on percussion, and which was somewhat removed from the heart, and which, from its situation, I interpreted as indicating something pressing either the arch of the aorta or some of its branches. I was not able to detect pulsation or any other symptom of aneurism, and consequently professed myself unable to say what that something was. The result proved that, although the true cause of the disease did not occur to me, I had nevertheless approached the discovery as nearly as could be done without actually making it; for, soon after this, the young gentleman died, and on opening the chest a large tumour of a steatomatous character was discovered pressing on the divisions of the trachea, of the aorta, and on the œsophagus. Another case of the same kind was published some time ago in the *Dublin Medical Journal*. We are, I believe, still in the infancy of diagnosis, so far as regards tumours developed in the chest, producing anomalous symptoms, and giving rise to suspicions of aneurismal or tubercular disease. With respect to the patient Byrne, I am inclined to think that the morbid phenomena are referable to a tumour of this description, and I ground my diagnosis chiefly on the absence of pulsation, which should be distinctly present if the dullness on percussion here observably depended on the proximity of an aneurismal sac to the parietes of the thorax.

As I am speaking of pulsation, permit me to observe that in some cases where there is no actual disease present, the pulsations of the heart are visible over a very large extent of surface, so as to convey the impression that aneurismal dilatation exists. Of this I have lately seen a very remarkable example. In a case which I saw this week with Mr. Cusack, the patient's heart could be observed beating violently over the whole chest, and Mr. Cusack, when he laid his hand on the patient's chest, said he could not divest himself of the idea that there was some unnatural condition of the heart and great vessels. Now the violence of the heart's action in this case depended on disease of the brain. In some inflammatory or congestive diseases of the brain with a tendency to coma the heart labours intensely, its pulsations are quite awful, and it seems as if it were about to burst through the parietes of the chest. Again, this extraordinary action of the heart occurring in cerebral disease is almost invariably accompanied by a hard bounding pulse. I mention these circumstances for the purpose of putting you on your guard, and that you should not in such cases allow yourselves to be deceived and

suppose that the symptoms are to be met in every instance by copious blood-letting. Some cases of this description will bear depletion well, others will not. You know it was a maxim of Laennec's, that in bleeding we are to be guided more by the strength of the heart's action than by that of the pulse. I have already shown that this test does not always hold good. You recollect the patient who was under treatment here some time ago with violent action of the heart and a hard bounding pulse. This patient, a strong healthy man, had just disembarked after a rough passage from Liverpool, during which he vomited much, and suffered intensely from headach, which he ascribed to the violence of retching. Walking along the quay he was suddenly attacked with hemiplegia, and was immediately brought into hospital, where he was bled and purged. Next day we found him still hemiplegic, and complaining of violent pain in the head. Active antiphlogistic treatment was used, but on the third day he became comatose, and was convulsed in the limbs of the healthy side. His face was flushed, his temporal arteries were dilated and pulsated violently, and his pulse was hard, while the heart pulsated with great strength. This attack came on during our visit, and I ordered a vein to be opened immediately. The blood flowed freely. When about fourteen ounces were taken the pulse suddenly flagged and grew extremely weak, and never again rose. He died in about two hours, and an ignorant person would have ascribed his death to the bleeding. On examination, sixteen hours after death, we found extensive puriform effusion on the surface of the brain, together with a large clot of blood and surrounding ramollissement. This was a very remarkable case, and conveyed a very important lesson, teaching us not to be too much led away by the violence of the heart's action; for I have no doubt that here the use of the lancet shortened the man's life. Had such a case as this occurred to any of you in private practice, it would be almost fatal to your reputation. Here we have a patient with his face flushed, his skin hot, his temporal arteries throbbing violently, and his pulse feeling like a piece of whipcord; he is blooded, and up to a certain point the pulse remains firm; he then begins to sink rapidly, and expires in two or three hours. Bear in mind then, that a state of the system may exist, in which the heart's action is intense, and the pulse hard and bounding, and yet where bleeding to any amount will be badly borne. Such cases are generally connected with inflammation of the brain accompanied by a tendency to coma. Here you must bleed with great caution, let the quantity you take away be moderate, and rather rely upon large relays of leeches and strong purgatives for removing the cerebral symptoms. You may afterwards endeavour to moderate the heart's action by the use of digitalis and opium; a grain of the former, and one-twelfth of a grain of the latter, made into

a pill with some extract of hops, may be given every second hour, until it begins to produce some effect on the heart's action, when it may be either discontinued or given at longer intervals, as the circumstances of the case require. Where, after bleeding and other antiphlogistic measures, the pulse continues high and the action of the heart violent, I can recommend digitalis very strongly, and the small portion of opium here combined with it can do no harm. Combined in small quantities with digitalis, opium does not produce any tendency to determination to the head, and it prevents the digitalis from sickening the stomach. I have frequently employed it, and found great benefit from its exhibition. I may observe that when you are anxious to secure the full sedative effects of digitalis on the heart and pulse, you must give it in large doses. In small quantities it does not act well, and seems rather to produce a tendency to excitement of the heart.

There is another patient about to leave the hospital to-day, on whose case I wish to make some observations. This young man, whom you have seen lying in the chronic ward in the bed next but one to Byrne's, caught cold about seven or eight months ago, followed by cough, wheezing, and dyspnoea, which, after a month or six weeks, subsided. About two months before he came into the hospital, he renewed his cold, and with it the cough and dyspnoea returned. On his admission he complained of difficulty of breathing, which attacked him every night; he went to bed well, and slept tranquilly for two or three hours, and then was awakened by pain and sense of tightness in his chest with great dyspnoea. When the paroxysm came on, it compelled him to get up and walk about the room gasping for breath, and, after continuing for two or three hours, with great dyspnoea, wheezing, anxiety, and cough, went off with free expectoration and sweating. As soon as the sweating and expectoration appeared, he lay down without any inconvenience, and slept quietly until morning. The only additional symptom he complained of was palpitation of the heart, which sometimes affected him when employed at hard labour. On examining the lungs there was nothing found except a few bronchitic râles. The heart was normal in its action, and no morbid sound could be detected by the stethoscope. In addition to this, you will recollect that the man was in the prime of life, had a full and well-formed chest, a quiet pulse, regular bowels, and a good appetite.

Here you perceive a man from repeated colds gets chronic irritation of the bronchial tubes, and this induces asthmatic paroxysms, which come on, as is usual in such cases, at a certain hour of the night. It was plain, therefore, that he was labouring under a well marked form of asthma, a disease which, in its pure and simple state, is seldom met with in hospitals, being generally observed in connexion with disease of the heart, or long continued bron-

chitis in old persons. Chronic bronchitis is one of the most common causes of asthma, indeed, you will scarcely ever meet a patient who has been subject to chronic irritation of the bronchial tubes, who does not also labour under more or less asthmatic dyspnoea. The disease is generally met with in persons advanced in life, and who have suffered from repeated attacks of bronchitis; it is not usual to find it in so young a man as this patient, and presenting as he does such very slight symptoms of derangement of the bronchial mucous membrane.

This case exhibits a remarkable proof of what may be done by simple means in relieving an urgent disease. The man was, with the exception of asthma, in good health; his bowels were regular, his appetite good, his pulse tranquil, and the signs of pulmonary irritation trifling. There was no necessity then for administering remedies to improve the tone of the digestive organs, nor were we authorised to use the lancet or apply leeches. I therefore confined my attention to two points, the application of irritants to the neck and chest externally, and the internal use of remedies calculated to relieve bronchial irritation. I ordered him to rub the nape and sides of the neck, and the fore part of the chest, with a liniment composed of strong acetic acid, ℥ ss, spirit of turpentine, ℥ iij., rose water, ℥ iiss, essential oil of lemons a few drops, and yolk of egg in sufficient quantity to suspend the turpentine. This liniment is an imitation of the celebrated liniment of St. John Long. I gave a bottle of the real liniment to Dr. Apjohn to analyse, and he thinks it consists of acetic acid, spirit of turpentine, and two animal matters, one containing azote, the other not; the latter probably some species of fat, probably goose-grease. Now this fat did not exist in St. John Long's liniment in the form of soap, it was evidently some kind of fatty matter blended with water, probably by means of trituration with yolk of egg. The active ingredients are spirits of turpentine and strong acetic acid. This liniment should be applied by means of a sponge. It acts as a rubefacient, and generally induces an eruption of small pimples after a few applications. The spirit of turpentine must be well mixed with the water (which ought to be added to it gradually) by means of yolk of egg, before the acetic acid is added.

With this liniment our patient was desired to rub the fore part of the chest, and the nape and sides of the neck. It was applied to the chest with the view of relieving the bronchial irritation, and we ordered it to be rubbed over the nape of the neck, along the course of the cervical portion of the spinal marrow, and over the sides of the neck along the course of the pneumo-gastric nerve, because all the organs to which the latter nerve is distributed are evidently affected in cases of spasmodic asthma. Thus a paroxysm of asthma is not only attended with increased action of the

heart, dyspnoea, and hurried breathing, but also with marked derangement of the stomach, particularly towards the termination of the fit, when the patient generally has a feeling of uneasiness in the stomach, with flatulence and a sense of fulness, induced probably by the derangement of circulation in the lung. You are aware of the close sympathy which exists between the stomach and lungs, and you must have been struck with the fact, that stimulant and irritating remedies applied to the epigastrium often relieve affections of the lung more completely than when applied to the chest. Thus in using the tartar emetic ointment for the relief of whooping-cough, it has been found to act most beneficially when applied over the region of the stomach, and the same thing may be said of Roche's embrocation, which does more good when rubbed over the spine or epigastrium, than when applied to the parietes of the thorax. On these principles, I ordered the counter-irritation to be applied over the course of the cervico-spinal and pneumogastric nerves, over the chest, and subsequently over the stomach.

This liniment in a very short time produces redness and heat of the parts to which it is applied, and it is more than probable that its effects are not limited to temporary rubefacence, but that it also acts on the nervous system. We have innumerable proofs that turpentine exercises a special influence over the nervous system, and we know that it is rapidly absorbed even without the aid of friction. I fear, however, that we shall never be able to confer on our liniment all the wonderful properties attributed to that of St. John Long's. You know it has been asserted that St. John Long's liniment never reddened the skin, except over the exact spot where disease was situated. I was assured by a young lady who used this liniment, that she rubbed it all over the chest, and that it produced no discolouration of skin, except in two spots where she felt pain. She at first mentioned but one spot which was painful, but St. John Long, having applied the liniment himself, told her she had deceived him, and that there was pain in another spot. It had other effects equally miraculous. An eminent Dublin lawyer declared that it drew nearly a pint of water from his head, and Lord Ingestre testified that it extracted quicksilver from his brain! These and other wonderful stories, told by several persons of distinction with a full belief in their authenticity, furnish a useful lesson to mankind, showing that gross credulity is not confined exclusively to the poor and the ignorant, but may be found among the highest classes of society. It is a singular fact also, and illustrative of the tendency which exists in human nature to deceive and be deceived, that notwithstanding the repeated failure and even fatal effects of St. John Long's applications, many persons still regard his opinions as oracular, and look upon

his remedies as inestimable discoveries. When I mentioned to the gentleman who brought me the bottle of liniment, that St. John Long himself died of phthisis, and brought this forward as a strong argument against the infallible efficacy of his remedies, he said that this very circumstance was one of the most remarkable proofs of his sagacity, for St. John Long had always maintained that the liniment was not suited to his own case, and that there was something in his constitution which neutralised its good effects; and so it happened, for when he applied the liniment to his skin, it did not produce the red spots which usually resulted from its application in other persons. In fact, such was the credulity of St. John Long's patients, that his death passed among them as the strongest proof of the infallibility of his medicines. Indeed he is considered by many of our nobility as a sort of medical martyr, who, having sacrificed life in the accomplishment of his mission, rising from earth, let his prophetic mantle fall on the highest bidder!

But to return to our patient. In this case the liniment did a great deal of good, but it was not the only means we employed. We observed that the asthmatic paroxysm came on every night, continued for two or three hours, and then went off with free expectoration and sweating. In order to prevent this, we gave him a draught, which he was to take when awakened by the pain and sense of tightness in his chest. He took this, and it had the effect of arresting the paroxysms, so that he no longer found it necessary to leave his bed. That this remedy had succeeded in averting the disease was plain from the following circumstance:—one day the clinical clerk had omitted to repeat his draught, and he consequently got no medicine; on that night the asthmatic paroxysm returned and went through its usual course as before. This draught was very simple, being composed of half a drachm of tincture of hyoscyamus, half a drachm of vinegar of squills, and the same quantity of ipecacuanha wine in an ounce of camphor mixture. It is scarcely necessary for me to explain the nature of the ingredients. The tincture of hyoscyamus possesses narcotic and antispasmodic properties, and ipecacuanha and squill are known to have great efficacy in disease of the bronchial mucous membrane, being both promoters of expectoration, and the latter also acting on the urinary organs. Without, however, attempting to explain the precise mode in which each of these ingredients acted, it will be sufficient to state that the combination had a beneficial effect, and checked the asthmatic paroxysms. We persevered in using it, as well as the liniment, until all tendency to asthma had disappeared, and the normal state of the function of respiration became perfectly re-established.

There is in the male chronic ward a patient named Garret Kane, to whose case I shall for

a few moments draw your attention. This man is about forty-five, and, like most of his countrymen who have been addicted to whiskey, he is beginning to show the fatal effects of intemperance. He has been ill for several months before he came into the hospital, and is at present labouring under general anasarca affecting the chest, upper and lower extremities, accompanied by an accumulation of fluid, but not very extensive, in the cavity of the peritoneum. I do not intend here to enter into the general pathology of dropsy, or to inquire what was its origin in this instance; I shall confine myself to an explanation of the reasons which have induced me to select the plan of treatment I have adopted. In the first place, it is a case of chronic dropsy; secondly, it is unattended by fever; thirdly, it is a case in which mercury has been used with some temporary relief, but the disease returned afterwards in a worse form; lastly, it is dropsy accompanied by obstinate diarrhoea, and therefore contra-indicating the use of purgatives or even of diuretics, for you are aware that the whole class of diuretic medicines acts more or less on the intestinal canal. I may mention here acetate and nitrate of potash, turpentine, colchicum, squill, and many other remedies of the same kind. All diuretics act either as purgatives, or they have a stimulant and irritating effect on the bowels. This patient has bowel complaint, and therefore we are prevented from giving diuretics, or purgatives; and the absence of inflammatory symptoms precludes the employment of the lancet or cupping-glasses. You perceive that our field for practice is extremely limited; we dare not bleed, cup, purge, give mercury, or diuretics; the nature of the case contra-indicates the use of all these remedies, and hence we are deprived of the power of using the most energetic agents employed in the treatment of dropsy. What then is to be done? Having observed that the man's appetite and thirst are very great, and that his urine contains a large quantity of albumen, that he has no fever and no symptoms of local inflammation, I decided at once on trying the efficacy of Dover's powder in doses of a scruple in the day, divided into four pills, and gradually increased until it amounts to half a drachm, or two scruples, in the twenty-four hours. A species of analogy exists between cases of this kind and cases of diabetes; in both there is the same tendency in the blood to part with its watery constituents, in both the same inordinate thirst and craving appetite are observed, and in both there is the same deposition of animal matter in the urine. The principal difference between them is, that in one case the watery fluid is effused into the cellular substance and peritoneal cavity, while in the other it is eliminated from the system through the medium of the kidneys. It was this analogy which led me to adopt Dover's powder in the treatment of this man's case. Last year we had a patient here under treat-

ment who was dropsical, and at the same time passed five quarts of urine daily; before I had recourse to the ordinary treatment for dropsy, I determined to try the use of Dover's powder. The disease yielded rapidly to this plan of treatment, and the man left hospital quite relieved.

In the patient Kane a small sore has formed on one of the lower extremities, perforating the skin and cellular substance to the depth of two or three lines; through this aperture a great deal of the anasarous fluid has drained, and still continues to flow off. This is a very fortunate circumstance, as it will tend to prevent any excessive accumulation in the cellular membrane. Previous to its occurrence I had ordered the scrotum and prepuce, which were enormously distended, to be punctured with a needle. The best mode of doing this is to prick the part quickly, so as to give as little pain as possible, the point of the needle should merely penetrate the true skin, the punctures should vary in number from twenty to fifty or sixty, according to the size of the part and the extent of the effusion, and they should be at least half an inch asunder. By observing these rules you will succeed in evacuating the water without running the risk of exciting erysipelas, which in such cases frequently leads to disastrous consequences. Puncturing with a lancet is not so good as with a needle, it is much more apt to excite irritation in the parts, and thus lead to the supervention of erysipelatous inflammation. The judicious application of acupuncture in cases of chronic dropsy often accomplishes a great deal, for when the external anasarous œdema is thus drained away, the fluid in the peritoneal cavity is more rapidly absorbed; in some cases, indeed, the good effects of external drainage on the ascites are so rapid, that we are almost tempted to believe that some direct communication may exist between the subcutaneous tissue and the apparently shut sac of the peritoneum. Be this as it may, the good effects in some cases are as decisive as if such a communication existed. This phenomenon countenances the hypothesis of the possibility of fluids percolating through lining membranes.

Note.—In the foregoing lecture I have adverted to a subject not hitherto sufficiently considered by pathologists, viz. the immediate effects produced in the bronchial tubes and pulmonary tissue when an internal tumour presses on one of the bronchi. The result is a certain degree of cough, expectoration, and dyspœa. In some cases the bronchial inflammation thus produced may go on to actual ulceration, which authors have been too much disposed to regard as being mechanically produced by the local irritation of pressure. Professor Albers, of Bonn, cites one case in which a scirrhous tumour of the œsophagus produced ulceration of the neighbouring compressed bronchus; but he says nothing of the manner in which this effect was accomplished. In some cases, no doubt, inflammation may be

propagated from the morbid growth, but in the tumours I speak of no evidence of inflammation existed. Professor Albers's observations on this subject may be seen in his paper on Widening of the Pulmonary Artery, *Rust's Magazin für die gesammte Heilkunde*, 42 Band, 1 Heft, p. 177.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXV.

Forceps—Turning.

GENTLEMEN,—At my last lecture I endeavoured to make you acquainted with some of the points of interest connected with the history of the forceps; I also told you the circumstances under which their application is indicated; it now remains for me to describe the manner in which they should be applied, and the rules which are to guide you in performing this operation. In doing so I shall confine myself to a few short practical directions, which I have found to be useful to myself at the bedside, and which will not only give you a simple view of this operation, but will materially assist you in performing it. The circumstances under which it is, *ceteris paribus*, most easy to apply the forceps, are where the head is at the inferior aperture of the pelvis, near to, or already touching, the perineum; in this case the straight forceps are sufficient for the purpose, and I shall therefore speak of their application first. Having previously ascertained that the bladder and rectum of your patient are evacuated, and placed her upon the left side, with the nates as near as possible to the edge of the bed, the first point to be considered is, which of the two blades is to be selected; in doing this recollect the rule, *to introduce that blade first, the lock of which looks forwards*, this will be sometimes the upper and sometimes the lower blade, according as the forceps are made; if you do not attend to this point you will be liable to find that, on passing the second blade, the locks are turned in opposite directions, and thus the blades prevented from being united; having selected your blade, and properly warmed and lubricated it, your next step must be to ascertain as correctly as possible the exact position of the patient's pelvis; the direction of the shoulders is of course no criterion, the great trochanter is the only guide to be depended upon, and is the more valuable because it also gives the direction, or nearly so, of the oblique diameters, this is important, because as the head is always more or less in one of the

oblique diameter; it follows that your forceps must be applied in the other. If it be the upper or right blade, which is to be applied first (and the head in the first position), you must guide it up to the head by the forefinger of whichever hand is most convenient, passing the instrument, as it were, beneath the great trochanter, and depressing the handle, so as almost to touch the patient's left thigh, its extremity must be slowly insinuated by a gentle vibratory motion between the head and passages, keeping your eye upon the situation of the trochanter and the general form of the pelvis as you gradually introduce it; if you attend to this point you will seldom fail to pass it up in the axis of the inferior aperture, and prevent it slipping into the hollow of the sacrum, which in the hands of a beginner it is so liable to do. As soon as the extremity of the blade has passed beyond the point of greatest pressure it generally needs little more than to be pushed gently upwards, as it will guide itself according to its degree of curvature; when it has passed to its full length the handle must be moved towards the perinæum, in order to afford sufficient room for the introduction of the second blade; this will be conducted in the same manner, except that instead of following the trochanter as your guide, the blade must be introduced in such a direction that the inner or flat surface of its handle shall be parallel, or correspond, to the similar surface of the handle of the first blade, this you should constantly bear in mind during the introduction of the second blade, for without attention to this point your blades will not be in apposition to each other, they will not therefore lock when brought together; in fact, the ease or difficulty of locking the blades depends entirely upon your attention to this circumstance. At the moment of locking you should be especially careful to surround this part of the instrument so entirely with your fingers as to prevent the soft parts, or hairs, from being pinched between them, nor is this always so easy to avoid as may be supposed, and requires great caution on the part of the operator, for it produces most acute pain, and frequently makes the patient give such an involuntary start as to run the risk of altering the position of the instrument.

When you have properly fixed the forceps, you must wait for the next pain, and as soon as it makes its appearance, its expulsive power should be assisted by grasping the handles firmly, and endeavouring to pull the head down in the direction of the inferior aperture of the pelvis. Recollect, gentlemen, that the forceps do not act only by simple pulling, they act very powerfully as a lever from side to side, and also by compressing the head. Wherever there appears to be considerable resistance, you will find it useful to tie a piece of tape pretty firmly round the ends of the handles, so as to keep up a constant pressure on the head of the child; this should be tightened at intervals as the head gradually

moulds itself to the passages. Your extractive efforts should be so varied in their direction, as to give the extremities of the handles a rotatory movement; these efforts should be made not only to imitate the duration of the pains as much as possible, giving the patient a little respite during the intervals, but also to allow the passages time to dilate as the head advances. When the head begins to approach the os externum, the handles should be gradually turned more forwards, and as it passes over the perinæum (which is to be supported in the usual manner) they must be directed completely forwards, or even somewhat forwards and upwards.

In applying the curved forceps you must be guided by the same rule in the selection of your first blade, as with the straight forceps, viz. that blade must be introduced first the lock of which looks forward. You will also remember that the pelvic curve of the instrument must correspond to the hollow of the sacrum. The direction, in which it is to be held at the moment of introduction, will vary somewhat from the former case, as the handles will have to be turned more forwards, moving gradually towards the perinæum as the blade ascends. The second blade must be guided by the handle of the first, as with the straight forceps, and the locking must be performed under the same precautions. In passing the curved forceps, you will find it frequently necessary to press the examining finger against the posterior edge of the blade as it is going up, thus preventing it slipping too far backwards towards the hollow of the sacrum. I need hardly say, that the extraction must be conducted in the same manner, and under the same precautions as in the former case, except that you must remember to turn the handles more and more forwards, as the head gradually descends. I have demonstrated the operation to you on the skeleton pelvis, because I think it is infinitely better than using the stuffed machine. You will find a plain pelvis, like the one before you, much more useful to practise on, than the best model which can be invented, because thus you make yourselves acquainted with the true direction in which the instrument should be introduced, and can detect all those little causes of impediment and difficulty which you are liable to meet with. I remember, when I was a student, teaching myself to apply the forceps in the following manner; having fixed a pelvis to my arm chair, I wrapped half a pound of tea in a silk handkerchief as smoothly as I could, and squeezed it pretty firmly into the pelvis; I now endeavoured to introduce the forceps in the proper direction as gently as possible, according to the rules which I have just given you; the blade required to be guided with some nicety between the pelvis and its contents, for if this was not attended to, it either stuck against the one, or dislodged the other; by this means I acquired that feel and management of the forceps which can only be obtained by frequent practice, and I can truly

say that it has assisted me more at the bedside than anything else.

By *turning*, gentlemen, is meant that operation in midwifery where the feet which had not presented at the time of labour, are artificially brought into the os uteri, and in this manner the child delivered. Hence turning comprehends two distinct acts; 1st, the changing the position of the child, and, 2ndly, the artificial delivery of it. This is no peculiar division of my own, for it was used by Stein, Aitken, Forster, Wigand, &c.; it is also adopted by Professor Naegele.

The first act, then, of turning, is that operation by which, without danger to the mother or her child, the position of the child is changed, either for the purpose of rendering the labour more favourable, or adapting the position of the child for delivering it artificially.

The indications for artificially changing the position of the child, with a view to facilitate the labour, or to render the position in which the child *cannot* be born more favourable, are all those deviations of the child's position from that which is necessary to a regular labour. You may ask me what is that position of the child which is necessary to a regular labour? I would answer, *where the long diameter of the child's body corresponds with the long diameter of the uterus*; as long as this is the case, it matters little which extremity of the child presents, for, as I have already shown you, as far as labour is concerned, the presentations of the inferior are just as favourable as those of the superior extremity. Any deviation of this, viz. where the axis of the child does not correspond with that of the uterus, brings it obliquely, or, in other words, we have a presentation of the arm or shoulder. The changing the position of the child, then, is indicated in all cases which require artificial delivery by means of the hand alone, but in which the child does not present with the feet.

The second act of turning consists in bringing, without danger to the mother or child, the child into the world with the feet first by means of the hand alone. This species of delivery evidently requires, as necessary premises conditions, a proper position of the child, viz., with the feet presenting, whether originally so or induced by art, and, secondly, a requisite size of the child, and a proper proportion between it and the pelvis*.

The operation of turning becomes very easily dangerous for the child, the more so the less favourable the circumstances are under which it is performed. In this respect it is far inferior to delivery by means of the forceps, for which reason, wherever it is possible, the forceps should be preferred to it. It is indicated in all those cases where nature is unable to expel the foetus, or which demand a hasty delivery of the child, but which cannot be attained by the application of the forceps.

The most common unnatural presentations

are those of the shoulder or hand and arm. They are frequently attributed to an oblique position of the uterus, but this is by no means correct, for the fundus may be directed to either side without at all influencing labour. The instant a pain comes on, it immediately moves so as to correspond with the line of the pelvic axis, and preserves this position as long as it lasts. When the child has been brought with its long axis into the axis of the pelvis, the faulty position ceases to exist, and now that it presents naturally the rest should be left entirely to nature. Deleurye pointed this out in 1770, and since that Boer and Wigand have done the same. It is a well known fact, that fewer children are born alive after turning, where the last stage of this operation has been accelerated, than where it has been left entirely to nature. The cause is this: the natural position of the foetus in utero is with the face bent forwards, the chin depressed upon the breast, and the arms crossed upon it. From what I have already told you, when speaking of nates' presentations, you will understand what results, if we attempt to hurry the labour by pulling at the feet. The chin instantly quits the breast, leaving a free space into which the arms slip, and as the child advances they gradually rise up above the head, so that the difficulty of labour is thus doubly increased, first, by having the long diameter presented to the superior aperture of the pelvis, and, secondly, by having an arm on each side of it. According to the experience of the celebrated Boer of Vienna, four-fifths of the children die after turning, when they have been brought into the world by pulling at the legs and body; while, if left to be expelled by the natural efforts, after the position of the child has been changed and the feet brought down, a full third of the children are saved.

It is a question of great practical importance, gentlemen, when is the fittest moment for undertaking the operation of turning. The most favourable moment is, *when the os uteri is fully dilated, and the membranes continue unruptured*. It is not always, however, that we can command such a favourable state of circumstances; the membranes may have been already ruptured, and yet the os uteri is not fully dilated: in this case we must not delay further, but proceed to dilate it gradually and gently, in order that the hand may be enabled to pass into the uterus. As long as the membranes remain unruptured, we may safely wait for the full dilatation of the os uteri. In the former case, where the liquor amnii has already escaped, we might wait until the uterus was so closely contracted upon the child, as would render turning extremely difficult or impossible; still, however, where the os uteri is hard, thin, and rigid, it will not dilate, and here we are compelled to wait until, spontaneously or by proper treatment, it becomes soft, cushiony, and extensible.

In all cases where the feet are towards the

* Naegele, MS. Lecture.

fundus uteri the patient should be placed upon her back, but where they are over the pubes I should be inclined to place her upon her knees and elbows; in fact, in every case where turning is very difficult, where the membranes have been some time ruptured and the uterus firmly contracted upon the child, I consider it by far the best position which the patient can take. Putting the woman upon her knees and elbows was recommended by Levret, especially where there is a pendulous belly, or the face turned towards the pubes. It was also recommended by Fielding Ould, as being the most convenient posture in cases where the child is to be turned. It has been objected against this position, on the score that women would never submit to it, but this is not the case. Under these circumstances, you will never find that the woman of good rank and education hesitates to comply with the wishes of her medical attendant. It is only in the lower classes of life that we see patients obstinately refuse to submit to this request, although they know it is to save their own life and that of their child. Where the circumstances under which turning is to be performed are highly favourable, viz. where the os uteri is fully dilated and the liq. amnii not yet escaped, there will be no necessity for the patient to alter her position, for we shall be able to turn the child with tolerable ease as she lies on her left side; but where the circumstances are not so favourable, I think that the mode pursued in Germany, viz. of placing her upon her back, is far preferable, and Dr. Dewees moreover recommends precisely the same plan; the patient should be placed across the bed, with her pelvis resting upon the edge of it, her back supported by pillows, and her feet resting on two chairs, at a proper distance apart and supported by assistants. According to the works on midwifery, we are told that we must introduce the right or the left hand, according as the feet are turned to one side or the other, but this is not so necessary as has been supposed, nor can we possess such a degree of dexterity and correctness of feel with the left hand as we do with the right, and in some cases of turning the position of the child cannot be ascertained before introducing our hand into the uterus for the purpose of bringing down the feet; for instance, in placenta prævia, where the placenta is attached to the os uteri, where a tremendous hæmorrhage has occurred, and where it is impossible to know how the child presents until the hand has entered the uterus, here we must always use the right, whether the feet be turned towards the one side or the other. Remember, gentlemen, that you cannot spare the strength of your hand too much, for if the turning prove at all difficult the strongest hand becomes exhausted; the hand, contracted, as far as possible, into the form of a cone, must be introduced into the vagina during a pain, as you are then ready to enter the uterus the moment the pain has ceased;

the other hand must be placed upon the abdomen to support the uterus, to assist in finding the feet, and in pushing the head into the fundus uteri; for the first purpose especially it is very important.

As soon, then, as the pain has ceased, you must introduce your hand through the os uteri; if, however, this be not sufficiently dilated, instead of merely pressing your hand up, you must gradually insinuate it through into the uterus with a twisting screw-like motion, so as to dilate the os uteri. If the membranes be not yet ruptured, it is directed in some works on midwifery to rupture them at once, before entering the uterus; but this method of practice is highly objectionable. It was a French author, Philip Peu, a man of great experience, who published his *Pratique des Accouchemens* in 1695, to whom we are indebted for the first correct rules on this important point. Peu recommended that the membranes should not be ruptured, but that the hand should be passed between them and the uterus until it came to the feet, and that then, and not till then, should the membranes be pierced. Deleurye strongly recommended this excellent practice in 1770, till which time it does not seem to have been at all noticed. Dr. Hamilton, in his "Elements of the Practice of Midwifery," paid attention also to this subject, and directs that in turning "the hand should be passed as far as the middle of the child's body, before attempting to search for the feet, or before attempting to rupture the membranes, should these remain entire till the aperture of the uterus will admit the hand."

The celebrated Boer has also highly praised this plan of proceeding. Hence after the hand has passed the os uteri it must be insinuated between the uterus and membranes until it comes as near the feet as possible; the membranes are now to be ruptured, and the feet taken hold of. The operation in this way is remarkably facilitated. From the membranes being ruptured at the side, the liquor amnii cannot flow off in any considerable quantity, and even this is prevented escaping by the presence of the arm in the vagina acting as a plug. In this manner the uterus is prevented contracting, and thus, gaining more power, the hand has plenty of room to act in it, and the child is moved with the greatest ease. Thus Dr. Hamilton says, "should the membranes be ruptured in the attempt, the operator must be ready to run up his hand as quickly as can be done with safety, when the waters being retained by his arm, the operation will be facilitated." This is of the greatest consequence in cases of placenta prævia. If a pain comes on whilst the hand is in the uterus, hold it quite still, for the slightest motion excites the uterus to longer and more powerful contractions; attempting to move it at this moment only tends to exhaust your strength, which ought to be carefully avoided; if it be kept bent

during a pain, an insupportable cramp is apt to come on, which deprives it of all power; it should be laid flat, with the inside towards the child. You must, however, never try to turn so long as the pains are violent, because the introduction of the hand is almost always a sufficient stimulus to induce pains even if they had previously nearly ceased. But I find the hour is expired, and must therefore delay the continuation of this subject till our next meeting.

Reviews.

The Edinburgh Medical and Surgical Journal.

We have selected from this admirable journal a few of the most interesting cases, of which we have given as condensed an abstract as the subjects treated upon would permit; and, doing this, we have carefully endeavoured to convey in our own language as clear an idea of the author's meaning as possible; but when it seemed impossible to deviate from his phraseology, we have not scrupled in taking it. The cases speak for themselves; they require no comment from us.

Cases of Anomalous Affections of the Respiratory Organs,

BY DR. GARDENER.

A peculiar convulsive action of the respiratory muscles.—This was the case of a young lady, æt. 17. "It may be described as a sudden spasmodic action of the respiratory muscles, producing a sound somewhat resembling a cough, but much louder and shriller, and differing from it in its general nature and character quite as much as in its intensity. Its sound may be said to be something between that of a cough and that of a howl." This was repeated every five or six seconds during her waking hours, but suspended during sleep, and commenced again in the morning. At this time the action was feeble and less audible, becoming louder and shriller, and in the space of an hour was quite audible all over the house, and even in the street. The voice was unaltered; it was impeded; but she possessed the power of suspending the action for a very short space of time, which enabled her sometimes to finish a sentence. It was supposed, from the time of life in which it commenced, that it might be connected with the functional changes incidental to that period. The catamenia, though scanty, were regular, but the disease continued to visit her occasionally long after their natural flow had been completely established.

The duration of the attacks was at first nearly a fortnight; afterwards they became less protracted. A considerable variety of treatment was employed, including a number of anti-spasmodics, tonics, and purgatives, and the local application of rubefacient plasters. Pur-

gatives were of more benefit than the others, of which class of remedies the tincture of black heliobore appeared most useful. There was always a very great discharge of solid fæces from the intestines, and the complaint ceased soon after. The Barbadoes aloes was subsequently given in small and repeated doses, together with steel and sulph. quina, which treatment was attended with advantage.

To the foregoing peculiar affection is appended—

A remarkable Case of Sneezing.

BY DR. BEILBY.

"A case important in itself, and which will give additional value to the one just related, from its obvious bearing upon the subject of it."

A young gentleman, thirteen years of age, had been affected with constant sneezing for three weeks; at first in rather violent paroxysms, with intervals of many minutes, but afterwards occurring from three to six times every minute, each sternutation occasioning now a comparatively slight degree of bodily agitation, and accompanied with a forcible expulsion of air between the nearly closed teeth, producing the sound "tchee." The nostrils were dry and red, the tongue was pretty clean and rather red, his general health was slightly disordered, and was said to be "very bilious." He had been taking considerable quantities of magnesia, on account of almost constant acidity of the stomach. Some months before he had suffered from headach and vertigo; he experienced benefit at that time from the application of leeches to the head. Cephalic snuff and two or three other nostrums were the only treatment usually adopted.

Blisters behind the ears, pretty free purging, and the injection of olive oil into the nostrils was the treatment adopted at first, and when, after a week, the sneezing was become much less frequent, perhaps about every two or three minutes, the carbonate of iron was recommended and the gradual exposure to cold air; at the end of five or six weeks he had no return of the sneezing, except when he was fatigued. The sneezing was always suspended during sleep, but recommenced immediately on waking, as he sometimes seemed to awake sneezing.

Case of Sudden Death from Perforation of the Pleura Pulmonalis, consequent on Disease of the Pulmonary Substance.

BY DR. GRAHAM.

John Meek, æt. 57, a labourer, was admitted into the clinical wards of the infirmary, on the 20th Nov. His symptoms were those of dyspepsia, and not particularly urgent. They consisted of weight and oppression at the epigastrium after meals, continuing till the contents of the stomach were vomited, often without, sometimes with, acidity, of pyrosis, and of frequent flatulent eructations; the bowels were rather costive; there was little thirst; the tongue was furred; there was emaciation, and

the legs were slightly œdematous. The pulse was quite natural; the abdomen was free from distension; the patient was without headach, gastrodynia, cardialgia, or other dyspeptic symptoms excepting those above stated. There was no tumour felt in the epigastrium, nor pain on pressure. His complaints were only of six weeks' standing, previous to which he asserted that his health had been good. His occupation had exposed him a good deal to cold, but not to hard labour, and his diet had been sufficiently nutrient. The treatment consisted at intervals in antacids, laxatives, opiates, bitters, blisters, and his diet was regulated, some steak being given to him daily, and the only vegetable matter allowed was bread. On the 4th December he complained much of hiccup, with flatulent distension, and on the 8th of pain under the right mamma, the pulse being 68 and natural. On account of this last symptom, a draught with nitrous æther and laudanum was given, and the pain immediately ceased. During his residence in the hospital the symptoms considerably abated. Before his admission the vomiting generally occurred twice daily—never after admission more than once, excepting when immediately excited by swallowing his medicines, and then very rarely, and for many days before his death he scarcely vomited at all; his spirits and appetite improved, and he thought himself recovering. After a good night he suddenly complained of great debility, and on the morning of the 15th asked for a cup of tea from the patient in the next bed, but before it reached his lips he died.

Sudden death very often occurs after long-continued organic disease of the stomach from rupture, and escape of the contents, but not with symptoms such as we had here, and the dissection was looked to with great interest, which took place twenty-nine hours after death. The following were the appearances observed.

Abdomen.—Omentum retracted, much thickened, and lodged in the left lumbar region; diaphragm pushed high into the left side of the chest; a considerable portion of the right side, near the ensiform cartilage, convex towards the abdomen. The stomach, lodged entirely in the left hypochondrium, contained a small quantity of coffee coloured turbid fluid; the peritoneal coat free from disease; great thickening towards the pyloric extremity: the diseased part was of several inches' diameter, having the pylorus towards one side; was elevated above the level of the mucous coat; its internal surface white, reticulated, over the greater part continuous, but supporting several rounded protuberances; its texture like soft and friable cartilage; its outline defined and circular.

Liver.—Right lobe adhered by a long narrow band to the diaphragm, its internal structure healthy. *Thorax* remarkably resonant on the right side, and there the intercostal spaces were raised to a level with the ribs,

though the subject was much emaciated, and the spaces therefore much depressed on the left side. The left lung was small, with numerous tubercles, particularly in the centre; the structure, in a comparatively small portion towards the edges, seemed tolerably healthy; and there was slight adhesion of the lower lobe to the pleura costalis.

The right lung was completely collapsed, pressed downwards and towards its root; the posterior part of the middle lobe contained some tubercles, the lower lobe adhered to the diaphragm by a copious deposit of firm lymph. Within this part existed a dark coloured cavity, about the size of an egg, having pulpy walls opening into the cavity of the pleura, and communicating distinctly with the bronchi. A small quantity of blood had lately been effused, and formed a thin clot, spread over and adhering to the pleura pulmonalis in the neighbourhood.

This case proves to us what indeed required no proof, innumerable cases having long ago established the fact, that very extensive organic disease may exist in organs of the utmost importance to life, without the patient being aware that any thing was wrong. This man never complained of a single thoracic symptom except the pain mentioned under the right mamma, eight days before his death. This was unaccompanied with the smallest fever, and immediately removed by an antispasmodic draught. Yet after death the appearances proved that the left lung had been long nearly destroyed, and the right considerably injured by chronic disease; and it is difficult to believe that the disease of the stomach could have been of such recent date as the patient had reported.

The chief interest in the case arises from the cause of death. It appeared that the patient had long breathed by the right lung alone, or nearly so. Subsequently the lung had become the seat of acute inflammation. The nature of the disorganisation Dr. G. thinks warrants him in believing that gangrene had occurred, although he could perceive no fœtor; but whatever had been the immediate cause of death, the pleura pulmonalis had been ruptured, air had escaped into the cavity of the chest, the lung, the only serviceable one, had been immediately compressed, and the patient suffocated.

Case of Tubercles in the Lungs in Extreme Old Age.

BY DR. CHRISTISON.

A man of the name of Watson, æt. 93, was admitted into the Infirmary with slight symptoms of general fever. Diarrhœa came on, and he sank rapidly after being in the hospital seven or eight days. There were no symptoms which attracted attention to the condition of the chest.

The body was examined chiefly with the intention of observing the natural appearances in so old a subject. There were some old ad-

hesions of the pleura. A great portion of the upper part of both lungs, but especially of the left, was condensed by grey hepatisation, amidst which, as well as in the less condensed portion of the lower lobes, there was seen a great number of small defined tubercles, most of them not bigger than a large pin's head. Near the apex of the left lung there was a small irregular cavity, without contents. There were some ulcers found in the lower part of the ilium.

It is worthy of remark, that the appearance of some of the organs of the body, whose changes are usually believed to indicate with tolerable accuracy the progress of life, was that of middle age only. The brain and heart were natural. The sutures of the head were strongly marked. The cartilages of the ribs free from ossification.

Case of Sudden and Unexpected Death, in which the Heart had only a single Coronary Artery, the Coats of which were Studded with Patches of Cartilaginous and Ossific Deposition.

BY DR. W. THOMPSON.

Mr. D., aged 49, was found dead in his bed with his eyes closed, his arms by his side, and every thing betokening his having died whilst asleep. Some years ago he suffered much from rheumatism, but had recovered, and was in the enjoyment of good health. He had had flying rheumatism in different parts of his body, at last settling in a leg or arm for ten days or a fortnight before his death, but complained of no other ailment. It was mentioned by one of his friends that he disliked walking fast.

Heart of natural bulk; depositions of bony matter at the roots of two of the aortic valves; a single coronary artery with bony and cartilaginous depositions, particularly hard at its mouth, and extending in small patches down its ramifications.

Case of Diseased Thymus Gland.

BY ALEX. HOOD, ESQ.

The patient in this case was about 15 months old, and of full habit of body. It was observed first about four or five months ago, that when she was surprised or irritated she was threatened with suffocation from some obstruction in respiration. In the course of the last three or four weeks she was seized with two or three fits, but in such a severe form, that respiration was for a brief period suspended. Her recovery from these attacks was rapid, and it seemed to have no unpleasant consequences, for her appearance in every respect indicated a high state of health. Soon after, while running on the floor, she fell, and suddenly expired in one of these fits. The child died in the fifth fit or attack.

Dissection.—There was no marked deviation from the natural and healthy appearance in the condition of the brain or its membranes.

On opening the thorax a small quantity of water was found effused in the pleura and pericardium. The thymus gland was examined with much care, and exhibited the following appearances. The thin and flat portion of the gland which usually expands downwards on the lungs, was removed by absorption. One portion of the gland rested over, and pressed upon the right subclavian vein; while another part of it lay over the subclavian coming from the left side, while a portion of it, in continuation of the part lying over the vein, extended upwards and backwards, and passed behind and under the vein, so that the left subclavian had three-fourths of its trunk completely embedded in the gland. When the gland had been carefully removed by dissection, the vein at this place was obviously contracted. The weight of the gland was not ascertained, but when put into a measure glass it displaced five drachms of water. The gland when cut into contained a considerable quantity of cream-coloured fluid or purulent matter. The mesenteric glands were in a scrofulous condition, and contained also cream-coloured fluid or purulent matter, though in small quantity.

Case of Obliteration of the Vena Cava Superior, at its entrance into the Heart.

BY DR. REID.

The above was found in a subject brought to Dr. Knox's dissecting room. The obliteration was two inches in extent, and formed, in the usual situation of the vein, a rounded cord of a cartilaginous feel, firmly connected to the surrounding parts, particularly to the anterior surface of the right bronchus, at the division of the trachea, by firm cellular tissue. Around it were several calcareous deposits, apparently connected with the bronchial glands. On the inner surface of the auricle, the entrance of the vein was only marked by a slight depression, and the auricle at this part formed a kind of digital pouch. The large veins at the root of the neck assisted in the usual way to form the vena cava superior, which became suddenly impervious at the part above mentioned. The vena azygos was twice its natural size, and became suddenly impervious where it joined the obliterated cava. The right intercostal veins were much enlarged, and a vein of the size of a common quill passed between the cava, immediately before its obliteration, and the upper part of the vena azygos. The vena azygos was joined at the usual place by the vena demiazygos, which was more than twice its natural size. The intercostal veins of the left side were also considerably enlarged. On blowing air down the azygos and demiazygos, they were observed to retain their large size as low as the diaphragm, and to form several plexuosities. The air passed freely along the enlarged intercostals and superior lumbar veins, and filling the vena cava ascendens. A vein of at least the size of a writing quill, formed by a branch from each of the azygos veins,

passed through the left side of the aortic opening, and joined the cava inferior.

All the systemic venous blood of the body, except that of the coronary vein, being poured into the right auricle by the vena cava inferior, that vein was also considerably enlarged, admitting the passage of three fingers.

The exact manner in which the blood passed from the large vessels at the lower part of the neck to the enlarged intercostals which entered the azygos veins could not be examined, as the heart had been destroyed by previous dissection.

Though the azygos, intercostal, and lumbar veins were all enlarged, yet it was difficult to conceive how the whole of the blood of the cava superior could pass with the necessary facility into the cava inferior, particularly as it was a retrograde motion.

The appearance of the parts around the impervious portion of the cava furnished no perfect clue to any supposed cause of its obliteration; it is, however, probable that the calcareous deposits around the vein were the remains of some enlarged bronchial glands, which, by their pressure upon the vein, produced its obliteration.

The subject was a female, about forty years of age, and died under the care of Dr. Smith, who furnished the following particulars of her case:—She was admitted into the charity workhouse, labouring under symptoms of hydrothorax. There was general anasarca, great difficulty of breathing, livid countenance, inability of lying down, scantiness of urine, pulse frequent, small, and irregular.

She was relieved of these symptoms by the use of diuretics. Shortly after her symptoms relapsed; the same remedies now produced no relief. She died rather suddenly under an aggravation of all the symptoms.

Inspection.—The right cavity of the thorax was full of serum, and the pleura costalis was much thickened. On the left side there were strong adhesions between the pleura pulmonalis and costalis, and the latter membrane was in many places fully three lines in thickness. The kidneys exhibited strong marks of Bright's disease. This woman had led a very irregular life.

Need we say that this journal should be read by every practitioner; by those who have an interest in their profession we doubt not but that it will.

FOREIGN MEDICAL LITERATURE.

Reflections on the Present State of Medicine in France.

BY DR. ST. GEORGE RANSOL,
Physician at Lucm.

BICHAT, extolled equally by the physiological, anatomical, and eclectic schools, is generally considered as the founder of our present physiology and pathology, and would doubt-

less have become an excellent physician, had not a fatal fall down stairs terminated his career at the early age of twenty-nine years. In the proem of his "Anatomie Generale," which strongly advocates the system of Brown, mixed with much real science and a great deal of absurdity, we find these remarkable words,— "What is the use of observations, if we are ignorant of the precise and absolute seat of the malady?—One might note the symptoms of affection of the heart, lungs, and gastric viscera by the patient's bedside from morning till night, for twenty years, to no purpose, as nothing but a tissue of contradictory errors could possibly result from it." And these unfounded expressions, taken literally, have been the source of all the pathological hypotheses of our time. But I would ask the partisans of M. Bichat, whether the descriptions, left us by Hippocrates, of the pathognomic symptoms of maladies, are not yet striking for their exactness and truth, and perfect models of clinical observation? Yet he was not a dissector, nor was Areteus of Cappadocia, whose works, by the bye, are not sufficiently read; has he not also transmitted to us faithful and most excellent descriptions of a multitude of acute and chronic affections?—and how closely do we follow even now his therapeutic treatment? Copious bleedings in visceral inflammation, and cupping, now too often replaced by leeches; in saburral affections, vomits and purgatives; in colics, baths and sedatives were the remedies he applied. And what more do we now know of the treatment of maladies of which that acute observer has given us a description?—Almost nothing; except indeed with reference to pharmacy, considerably improved and extended since his time; not, then, to our pathologic anatomy certainly, but to the perfecting of the natural sciences, and more frequently to chance, are we indebted for our therapeutic advancement.

Sydenham, one of the most skilful of his day in the healing art, whose works will live as long as the art itself, did not devote his great abilities to the examination of the dead. In his writings we find no descriptions of openings and examinations post mortem, that fruitful theme, which now gives birth to hundreds of volumes constantly issuing from the press at Paris, and which are good for nothing but to send those to sleep who have the patience to read them; the clinic of M. Andral, for example, in five volumes, the two first of which contain matter worth attention, the three last scarcely anything but post mortem examinations, and the essence of the whole might be compressed into one. But we do not understand the art of generalising in Paris, only that of detailing, which to the enlightened physician is insupportable. Nor can this mania for multiplying clinics tend in the slightest degree to the progress of the art. That which we really want, and are likely to want whilst the present mode of writing con-

tinues, is an able concentration of the dogmas of experience and observation of ancient and modern times.

With reference again to those inconsiderate and anti-clinic expressions of the young and lamented Bichat, it is to be observed, that maladies exist in the living not in the dead body, that the organic alterations found in the latter are often the effects of the primordial symptoms of the malady, or of humoral depravities, the just appreciation of which defies chemical acumen. Nevertheless the examination of the dead has its utility; we discover the seat of the malady, and sometimes the cause of symptoms previously inexplicable; it proves also how utterly powerless the efforts of art must be where there is disorganisation of the tissues; it may sometimes enlighten the practitioner as to the diagnosis and treatment of maladies; but it is no less certain, that from this branch of pathology we derive less assistance than from therapeutics. Without, then, depreciating the use of this mode of investigation, to which in truth I should incline with ardour were it possible, I have always deplored those fatal abuses of it which for sixteen years have resulted to the human species.

M. Broussais, who considers himself the propagator of the doctrines of Bichat, contrives to render that, which was already sufficiently confused and obscure in them, absolutely chaotic; some, too, of our most assured and satisfactory dogmas he treats as mere fantasies of the ancients. Thus, despite of all the enthusiastic respect which his writings manifest for the memory of his illustrious and departed master, he actually destroys his system of pathology in toto. According to the boastful and acrimonious language of M. Broussais, until he threw light upon the medical art nobody knew any thing about it, but now, by his definite and decided praise of gum-water and leeches, he has most happily fixed the treatment of all maladies. Truly, it is not without reason, that M. Broussais has been compared to the celebrated Dr. Sangrado; that most spirited and admirable portrait of Le Sage's may indeed stand very well for that of all the systematisers of all times and countries.

The unfortunate dissensions existing amongst our practitioners, and especially the discord between the schools of Paris and Montpellier, I have long deplored. All the world knows that Montpellier has for many centuries been the first school of medicine in France. Founded about the end of the tenth century, it reached its highest point of celebrity towards the middle of the last, thanks to the super-eminent talents of Sauvages, Barthez, &c., not forgetting Bordieu, who, though he never obtained a professorship, was justly celebrated, and may with strict propriety be termed the father of modern physiology. At that epoch most of the professors of the schools of Angers, Toulouse, Besançon, and even of Paris, either studied altogether, or perfected their studies at that celebrated University, then one sole doc-

trine of pathology existed throughout France; what has caused the destruction of this unity, and raised in its place an obstinate, bitter, and prolonged dissension? The causes, if I mistake not, are these:—the School of Paris, tired of its subservience and comparative inferiority, was waiting a favourable moment to assert its independence, when out burst the Revolution, overturning in its horrid career all political institutions, all scientific establishments, and abolishing every academy and university of medicine. The professors of Montpellier ceased not to remonstrate, and Paris, from its numerous and immense hospitals, became the centre of medical education; thither flocked all the youths destined for the profession, and, under the Desaults and Pelletans, &c., received their instruction. The government of 1793, finding it necessary to have a great many surgeons in the midst of a Continental war, created schools of *health*, as they were termed, and M. Baumes, already decked with long-acquired academic honours, filled the professor's chair.

Meantime M. Pinel, ever jealous of the fame of Montpellier, from which school he at length entirely separated himself, endeavoured to found a Parisian school; and further spurred, it may be, by the irresistible action of the Revolution, put forth a nosological treatise; a jargon of uncouth and barbarous words supplied the place of the fixed and appropriate terms of art, and this miserable performance, rousing the attention of the medical world, affixed to his name a degree of celebrity, or rather of notoriety, which endured through the space of nearly twenty years. From the date of his career the unhappy schism between the schools of Paris and Montpellier may be very easily traced, and its augmentation and continuance to the visionary hypothesis of the young Bichat and his followers. Nothing can be more certain than that the School of Paris, since its separation from that of Montpellier, has been running from error to error, and has experienced the fate of all schismatics; it is divided within itself into a multitude of rival sects, each the enemy of the other.

Matters, however, now begin to mend a little, thanks to the journals of Montpellier and to the writings of Rouzet, Miquel, Bonquet, and many other medical men of the highest merit. It is indeed time that there should be a perfect reconciliation between the two schools, and that we should be enabled to cast aside the odious phrases, *that* is the doctrine of *Montpellier*, *that of Paris*, and substitute the more creditable phrase to all parties of *that* is the doctrine of *France*.

Note on the Treatment of Congenital Luxations of the Thigh.

BY DR. PRAVAZ.

After going over the history of congenital luxations of the thigh, successfully illustrated by the labours of Paletta, Dupuytren, Humber, and Morlaix, and by the interesting commu-

nications of M. Breschet to the Academy, M. Pravaz relates the case of a little girl suffering under that affection, which was treated with complete success at the *Orthopedal Institution of Paris*.

Case.—In the course of April 1831 a child three years old, daughter of a practitioner in the law in the environs of Paris, was brought to M. Pravaz for a confirmed lameness, with commencing distortion of the spine. On examination there was every symptom of luxation of the right thigh; the ascensional movement of the extremity of that bone on the external surface of the ilium every time the body rested on it; the flatness of the corresponding buttock and the extreme curvature of the loins; the whole of the right member was rather less developed than the left; walking very difficult, and painful if prolonged. The luxation had preceded birth, and some of these signs had been remarked a few days after it, but no idea of injury sustained during birth could arise, as it was a head presentation. The lameness increasing from year to year, attempts had been made to remedy the inequality of the two members by repose and a slight extension, but soon desisted from, owing to the wasting of the flesh from the inaction of the muscular system.

The success announced by M. Humber, determined M. Pravaz to attempt the cure; and, first, to obtain the progressive elongation of the femoral muscles by continued extension, he caused a mould to be made of the child's pelvis, and enveloped it in two pieces of wood suitably lined in the hollows and separable at pleasure by the action of a moveable screw, so that the pelvis placed between them might be firmly encased, the under case large and thick, to enclose the projections of the hips, and fastened in front by buckles on each side of the apparatus completed the means of contra-extension. For the extension, an iron cylinder, firmly stuffed with wool, was destined to enclose the limb; at its lower extremity a cord was attached and fixed to a bent lever, moveable round an axis and pressed by a weight of which the power might be varied by making it act on an arm of more or less length. All this apparatus was adjusted on the moveable orthopedal bed, that the child might use the muscular action necessary in aid of nutrition and the support of strength.

Three months of extension produced such an elongation of the muscles, that the ailing limb might not only be drawn to the same length as the other, but even made to exceed it a little. The reduction was tried by the following means:—A rod of wood, eighteen lines long and four and a half broad, with a hole at one extremity to receive a pivot, was fixed to the plane on which the child rested, the exact height of the articulation of the thigh; at the other extremity was a cross-beam like a gibbet, serving as a fixed point to a pulley of six cords, the moveable part of which was attached to the extremity of the

apparatus enclosing the limb. On gently pulling the free cord, a rotatory motion of the lever around its point was caused, and thus was accomplished at the same time the progressive extension of the extremity of the limb beyond its enclosure and the retention of the head of the thigh in its natural cavity, whether luxated below or in front.

In the first experiment, M. Pravaz was aided by MM. Berard, jun., and J. Guérin; but the extension being made a little out of parallel with the axis of the body, gave pain to the child, and the operation was deferred till the following day. This time it was resolved to make the abduction as far as possible, so as to gradually bring into action the tractive force at the same time that the thigh, seized as a lever of the first order, rested on one of the hands of the operator serving as a fulcrum, while the other raised the action at its utmost extremity. This manœuvre was completely successful. M. Berard felt the head of the thigh slide over the surface of the ilium, enter, and remain in its cavity. The two limbs were now of the same length, nor was any alteration caused by rubbing the thigh up and down, but a slight sensibility was manifested in the hip. The child was then left to repose; and, to prevent the reissue of the head of the bone, a thick cushion was interposed between the hip and its case, and a bandage embracing the pelvis and upper part of the thighs was tightly laced round the body. The pain experienced in the articulation appeared to increase during twenty-four hours, it then gradually diminished.

In about a month experiment was made to try whether the child could walk. The thigh did not, as before, become displaced, but its articulation was found not yet so firm as the other. To hasten, then, the reparative operations of nature, a mechanism was adjusted to the orthopedal bed, by means of which the child could move the limb as if walking; and afterwards, in pursuance of M. Breschet's advice, with the help of certain mechanical apparatus, the circular movements were rendered practicable. These movements produced more pain than simple flexion.

A few weeks after, the child walked with a firmer tread; the lameness, considerably lessened, now appeared the consequence only of the relaxed state of the articular ligaments, and the limb altogether had recovered its flesh, and was very nearly as plump as the other. At the expiration of three months after the reduction the child was removed from the hospital, but the treatment continued, and the amendment progressed, still, however, with fatigue and a slight inclination to the right when walking, with transitory pain in the articulation, but her health continues excellent, and there is not the slightest indication of a relapse.

M. Pravaz's deductions from the foregoing case are these:—

1st. All original luxations of the thigh, whe-

ther from primitive want of development, or of mechanic power, or even from an affection of the cotyloidal cavity analogous to that which produces spontaneous luxation, are deformities curable by art.

2nd. Even when the cotyloidal cavity is entirely wanting, it would be advisable to attempt to luxate the femur below and then outwards and upwards, the lameness would be less marked and the deformity less considerable; this was proposed in the above case, and approved by MM. A. and P. Dubois, Marjorlin, Berard, jun., and Lalourcy; and M. Pravaz is of opinion that one of Humbert's cases already offers an example of luxation in front, happily substituted for that operation above and behind.

3rd. The processes of Humbert are too complicated; but whatsoever process may be used, time must always be allowed to obtain the progressive elongation of the muscles.

4th. For the reduction, a strong abduction, aided by methodical pressure on the trochanter, is preferable to simple extension.

5th. When the reduction is effected, it is necessary, in order to ensure the success of it, that the limb should be exercised in various movements, the body continuing still at rest.

Notice of a Fœtus putrefied in the Uterus.

BY DR. VASSAL.

The serious maladies which result from the putrefaction of the placenta retained in the uterus after miscarriage, and especially after regular accouchement, sufficiently foretel the symptoms of putrefaction of the fœtus itself; this latter case is fortunately rare, but for that very reason ought to be particularly noted, that some light may be thrown on the union of both cases for the direction of the conduct of practitioners.

Madame X—, twenty-five years of age, of sanguine temperament and sound constitution, and already the mother of several children, had always been safely delivered, and at each pregnancy her embonpoint had remarkably improved. In the beginning of November, 1833, she used a bottle of Seidlitz water as a purgative; on the 7th her courses came as usual, though more serous and less abundant. From this date she began to feel indescribably ill at ease, with shiverings, more or less frequent, often during the day; at night oppressive heat, and, after dinner a distension of the abdomen, which compelled her to lie down; her embonpoint began to diminish.

December and January, courses as usual, but serous and little in quantity.

February 6th. She had a slight fall on the seat; on the following day, epoch of the courses, a sero sanguineous flow lasted three days; health declined more and more, despite of the continuance of a voracious appetite.

On the 1st of March, immediately on her return from a ride on horseback, she suddenly rendered from the womb about a porringer of blood, and instantly fainted. At seven in the

evening I saw her, and found her condition thus:—Excessively thin; skin yellowish, dry, and hot; pulse 80; tongue pale, moist, and coated; the right hypochondrium swelled and sonorous; the uterus was placed above.

I suspected the existence of chronic inflammation; however, I announced that the womb contained something, either a fœtus, a mole, or hydatids; but the continuance of the courses precluded the idea of pregnancy in the minds of all present, neither did any change in the breasts announce it.—Repose, milk, emollient, drinks, cataplasms on the abdomen; during night increased fever with copious sweats.

March 2nd. Pulse 100; ardent thirst; face red.—Twelve leeches to the anus. At midnight the sweats returned; three in the morning bristling of the hair and gnashing of the teeth; icy coldness of the whole body; cadaverous countenance; pulse scarcely perceptible; fever returned; then profuse sweats.

3rd, 12 noon. High fever; urine limpid; the uterus seemed to swell in a greater degree; at four, an access of cold.

4th. Every four hours, injections of a decoction of belladonna into the vagina, with a glass of very hot sugared water, mixed with a spoonful of orange-flower water, to be taken every five minutes as soon as the algid state came on; it succeeded, the cold lasting but twenty minutes.

5th. Same symptoms; cold state returning at different hours; a flow from the womb, blackish, thick, and of insupportable fœtidity; from the touch, I found that the uterus occupied the cavity of the pelvis, though examination by touch offered nothing particular; no uterine pains whatsoever.

6th. Return of the algid state; relieved by three glasses of very hot sugared water; flow from the uterus continued, but less thick.

7th. Early in the morning, pulse 102, towards noon 80; the cephalalgia ceased; skin supple and less hot; the flow more serous and much less fœtid, and with it, in the course of the day, several membranous shreds; with a great quantity of encephaloideous and sanguineous matter. Ten at night; the right hypochondrium less tympanitic and sonorous; pulse 70, and perfectly calm. This state continued until one in the morning, when, without effort or uterine pain, a fleshy mass was discharged, followed by an excessive flow of blood and most excruciating contractions of the uterus.

I saw her at five in the morning; countenance pale and affrighted; eyes salient and haggard; pulse slow, small and concentrated; in fact, the vulva was enormously distended at its upper extremity by a black homogeneous mass, the size of an adult head. At the entrance of the vagina was a second mass, considerably less; and the vagina itself contained a placenta as large as at the eighth month of regular pregnancy: this placenta had undergone no alteration in its normal colour or

density, but had no umbilical cord; its extraction was accompanied by swoonings, and a deep saffron colour of the skin. Cold water sprinkled over the face dissipated these alarming symptoms.

Treatment.—Chicken broth, an infusion of tilia with syrup of orange-flower, an antispasmodic potion, injections into the vagina many times a-day of a decoction of quinquina. From the fourth day substantial aliment. On the 8th she sat up a few hours, but her weakness was extreme;—diffusible tonics, sulphur baths. Her courses appeared on the 7th of April, returned on the 7th of May, and continued regular.

The expelled fleshy mass was a foetus of three months apparently, though the series of symptoms indicated a pregnancy of four completed months. All the integuments and cellular tissues were entirely dissolved; the muscles of a red-brown, flimsy, and friable to the touch, adhered to the bones only by their tendinous extremities. The bones of the limbs were entirely bare; the face deprived of its soft parts; the anterior fontanelle wide open; the skull void of the cerebral substance. The coronal was flattened in a vertical direction; its upper part separated from the parietals, and, like the antero-superior angles of these, appeared greyish and dried up, as if they had been long exposed to the action of the air. The abdomen was open, and without the digestive tube.

M. Vassal inquires, what could be the cause of the death of the foetus, and at what epoch did it take place? The primitive symptoms induce him to think that the uterus, at the time of conception, must have been affected with a subacute metritis. It seems at first as if the death ought to be attributed to the fall on her seat; but in that case would there not have been partial disengagement of the placenta, loss of blood, lumbar pains, &c.? or was it from the presumed morbid state of the uterus? It appears, indeed, highly probable that it was so; the walls of the uterus, hypertrophied by disease, must have contracted its cavity, and thereby prevented the development of the foetus. Abortion must infallibly be the consequence; on this opinion M. Vassal rests; but it accounts not for the putrefaction. Some accoucheurs have presumed that rupture of the membranes resulted from the fall, and thus gave access to the air. But the flow, which preceded the abortion by two days, refutes such presumption; besides, air is not indispensable to putrefaction; nor do the laws of physiology account for such a decomposition within the mother, says M. Vassal; and further, he is inclined to explain the matter by an intense phlegmasia, which, invading the whole cutaneous system and umbilical cord, would have terminated in gangrene. And a very remarkable fact may be adduced in support of his opinion.

A woman, *æt.* 19, of strong constitution and sanguine temperament, became pregnant, for

the first time, in 1806. Her health underwent no change until the end of the fifth month, when she began to feel exceedingly uneasy and depressed; troubled with fantastic appetites, frequent shiverings, accompanied with general heat, intense headach, and flushing of the face. She was bled frequently in the arm. At the end of the ninth month the pains came on in due course; the coverings formed a voluminous pouch. On its breaking there came a thick, blackish liquid, and of such insupportable fetidity, that it was necessary to throw open every inlet to the air. The delivery was prompt and natural; a living infant at its full term was born, but wanting the right arm, and with a circular cicatrix covering the scapulo-humeral articulation. "Struck with this appearance," says M. Vassal, "which the woman attributed to meeting a beggar with only one arm, I examined carefully the clots of blood, and found the humerus, radius, and cubitus, which I sent to Professor Chassier."

Now, could not that which took place in this case have happened also in the former? The maladies were the same—the results the same, except that in the one case the affection was general, and in the other limited. In the first case, the rupture of the umbilical cord must have accelerated death and the putrefaction. The placenta remained sound, and receiving all the uterine blood, must have become engorged, which accounts for its large size.

M. Vassal then endeavours to explain the morbid symptoms of the first case. He does not admit the absorption of putrid miasma, as the double obstacle of the amnios renders it impossible through the uterine membranes. And further, from the special irritation, often fixed, of the internal surface of the amnios, caused by the presence of a dead foetus, there arise little vesicles, closely grouped, filled with saline crystals, and lying one over the other like the scales of fish. M. Guillemot has preserved in alcohol a conception of two months; all the inner surface of the amnios, and the integuments of the foetus, are covered over with these crystals,—another barrier to the supposition of the absorption of miasma.

When the placenta is putrefied the absorption is incontestable; the uterus and the putrid matter are then in contact, and malignant fever almost constantly results. "If," says M. Vassal, "our theory be confirmed by facts, it must follow, that the putrefaction of the foetus is less dangerous for the mother than that of the placenta."

MILK.

THE scientific world in France is now engaged in verifying some curious experiments upon milk, particularly as regards its preservation. The discovery is a remarkable one; and if it is founded on reality will make a great revolution in a part of our alimentary regimen,

and in a very considerable branch of our agricultural industry. It is nothing less than reducing milk to a solid state, so that an inhabitant of Paris may get his supply from Normandy or Auvergne and preserve it in the same manner as sugar. The discovery has been made by M. Gabriel Gaimand Caux.

Reports of Societies.

MEDICO-BOTANICAL SOCIETY.

March 10th, 1835.

JOHN HANCOCK, M.D., in the Chair.

A COMMUNICATION from Dr. Hamilton of Plymouth, on the seeds of the *Coo-ee-choon-jaal-ye*, was read. This Indian plant grows near Riobamba, not far from Chimborazo, and is reported, by Dr. Bancroft, to be of considerable value in the treatment of the Mal de San Lazaro, or, what is commonly termed the Cacabuy. It belongs to the class and order Pentandria, Monogynia,—natural order, Violaceæ.

Another communication from Dr. Hamilton, on the *Cevadilla*, was then read. It is said to be antheimintic, diuretic, anti-rheumatic, and antispasmodic.

A paper by Dr. Hancock, entitled "Notice of a Plant called *Coomi-paru* by the Natives of Guiana," followed. The *Coomi paru*, or purple bush, is used to intoxicate fish, so as to enable the fisher to catch them with the hand. It grows to about eight feet high; the stem is jointed and very frondose; it flowers at all seasons of the year, and is constantly covered with leaves of a purple colour; the flowers are small and white. The fluid circulating in the plant is lactescent, and nearly as consistent as cream: it is so abundant as to trickle down in a small stream when the bush is wounded. Four drachms of the dried and powdered leaves are digested with six of proof-spirit in the sun, and form a tincture, from five to ten drops of which are a dose, to be repeated every four or six hours, in internal inflammations. When given in the dose of twenty or thirty drops it causes borborygmi, followed by a rash, or rather diffused patches with a slight but sensible elevation of the skin, attended with itching and increased perspiration. It appears, therefore, to act by causing counter-irritation. Venesection must be premised.

There is reason to believe that there is not only an excitement of the surface, but also of the whole intestinal canal; it is, in fact, a sort of temporary irritative fever, which is induced by the *Coomi-paru*, which tends to arrest the inflammation, giving great relief to the sufferer.

A seed of this plant taken internally acts as a powerful hydragogue cathartic, bringing away immense quantities of water per anum, and is of considerable service in cases of dropsy.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 28th, 1835.

DR. ADDISON, in the Chair.

MR. QUAIN said, owing to the long silence that had prevailed, he was prompted to inquire of the members their experience in the destruction of granular growths affecting the external coats of the eye, and the remedies employed, for he must confess that he had found them exceedingly unmanageable, and often requiring, if accomplished, several months to restore the tunics to a healthy state.

Mr. Greenwood considered that it was of the greatest importance to ascertain, first, whether the granular affections existed in an acute or chronic form, but he believed that the latter condition generally prevailed; and, secondly, how far the system was concerned in producing these unnatural growths, for it would be highly prejudicial to attempt their removal until their producing causes were rectified, for he was satisfied that all diseases of the eyes were complicated with a derangement of the constitution. As an application, he was firmly convinced that the liquor plumbi subacetatis, in its undiluted form, was superior to any other.

Mr. Rice proposed and advocated Mr. Guthrie's stimulating plan, which consisted of the combined agency of Goulard's extract and the nitrate of silver.

Mr. Horne suggested the use of one part of calomel to ten parts of sugar, blown into the eye *through a quill*.

Mr. Quain considered that he had given a fair trial to most of the remedies in general use, but whether he employed local applications, or topical, such as bleeding, blistering, counter-irritation, he was far from being satisfied with the result. He believed that the disease arose from bad treatment of other diseases affecting the conjunctiva; and if he offered a theory it would be, that he considered them to arise from an enlargement of the blood-vessels producing the tubercles which constitute the mischief, causing the nebulous appearance of the cornea.

Mr. Greenwood was proceeding to make some practical conclusions on the subject, when the able president reminded him that the time had arrived for Mr. Strettor* to lay before

* [When Mr. Strettor, at the former meeting, was requested to bring forward variola, it arose, we believe, from his having hinted that he was able to prove that the vaccine ichor loses its protective influence after the age of puberty, instead of seven or fourteen years, but on this essential point he made no remarks. If we could arrive at a satisfactory conclusion, to what extent vaccination did protect the system, we should then be enabled to set at rest what the public at large have long

the Society his remarks on small pox, which were done, to use the words of a member, with "great modesty and propriety," but we suspect his surmises for the most part were derived from theoretical reasoning, his practical inferences having been drawn from the bills of mortality, from which source he had drawn up tables showing the decrease of deaths from small pox since the introduction of variolous inoculation, and its subsequent great diminution through the sanative and powerful influence of vaccination. Mr. Stretton then propose three questions for discussion, which we pass over in silence, as the speakers disregarded them almost *in toto*; the discussions that ensued tending to prove the power of vaccine virus over small pox, and to what extent the system is secured by its use, these we shall briefly relate.

Mr. Greenwood thought that the vaccine ichor became, 1st, almost inert if a rusty lancet was used, or certainly not affording protection against variola, the vaccine matter becoming, he would almost be inclined to infer, oxidised; 2ndly, by amalgamating the two matters we are not able to produce a mixed eruptive disease, either the one or the other takes the lead, and probably passes through the pustular, skipping the stage of maturation, into the stage of incrustation; 3rdly, high temperature and great moisture are found to nullify its action; and, 4thly, he regarded the best criterion that we are in possession of, to prove that the introduction of the vaccine has produced a constitutional, as well as a local, effect, is, that we should have a well distinct indurated elevation, giving the appearance of two margins to the pock, surrounded by a circumscribed inflammation. This he considered superior to the test recommended by Mr. Bryce, which was instituted to prove that if, during the regular progress of cow-pox, a second inoculation be performed, five days after the first, the affection produced by this repetition, will arrive at maturity, and fade away, at nearly the same time as the pock arising from the first vaccination.

Mr. Leese, whose experience on this subject, we believe, is equal to any practitioner's in this metropolis, fully concurred with the last speaker, and, in fact, acknowledged that he had anticipated some remarks that he had intended to have offered; however he would add that all those cases of variola occurring after vaccination, and that had come under his immediate observation, he found that the patients had had, invariably, only one incision made, and, although some differ on this point, he felt convinced that we ought to endeavour to create as much disturbance in the constitution as possible; but our means, unfortunately,

expected from the profession, in part in vain, and what has almost solely occupied the attention of those practitioners who have endeavoured to investigate the subject.—*REP.*]

afforded us the power of producing only a very slight degree of irritation, but by making two or three in each arm, we certainly increased it, and thus placed the patients much more securely than they otherwise possibly could be rendered.

Dr. Sayer added his testimony in favour of the perfect security that vaccination afforded the human race, for having been several years on the continent attached to the medical staff, many thousand soldiers (the number, unfortunately, not named) under a medical conscript from the French government, were compelled to undergo, wherever the least doubt existed, re-vaccination, previously prepared by warm-baths, aperients, diaphoretics, and a few days' rest in the hospital, and the same restrictions were enforced with all the recruits, and the result was, that not a single case of small-pox occurred for several years, and the only two that he saw, happened to two individuals, one aged 25, the other 26 years, but they did not come within the power of the conscript.

Dr. Sayer afterwards related an interesting case, proving the prophylactic virtues of the vaccine virus over variola, in a remarkable degree. A child, aged 7 months, was carried by its mother for vaccination to the Small Pox Hospital on the 13th of the month; on the 23rd of the same month, the mother became affected with variola in its severest form; for seventeen days the parent suckled her offspring, but it remained in a perfect state of immunity, although in spite of liability of suffering through infection, and of receiving into its system a secretion naturally loaded with the poison.

ACETUM OPII SEDATIVUM.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I shall feel obliged by your giving me a corner in your widely circulated Journal for the accompanying letter from an old habitual opium consumer; I use the word consumer in preference to any other, as it gives a pretty good idea of the quantity that these poor deluded creatures are in the habit of swallowing. It is requisite that I should state, that the patient from whom I received the letter which I forward to you, selected from a host of others on the same subject, became a slave to its prejudicial influence at a very early period of his life. The cause of his taking it having been removed, he gradually, after immense fortitude, discontinued its use for some years. About two years since he was attacked with rheumatism in its severest form, which required more active treatment than any case I ever remember encountering. This had no sooner been overcome, than the right eye was seized with violent ophthalmia, of the two it was more obstinate to remove than the former disease.

The chronic rheumatism my patient complains of is one of the ill consequences arising from taking the drug, for the relief of which small doses of the same substance proves the best remedy, or the sufferers gradually sink, or the sufferers assume another form. However dreadful it may be to contemplate, it is our duty to communicate, but this I must defer for the present, having lately occupied the pages of your periodical rather largely, which prevents me entering more fully into this patient's history.

Having received thanks from many of my professional brethren for the formulary of the acetum opii sedativum, I shall shortly send you for publication my method pursued for chemically obtaining the pulvis antimonalis, by which means I am enabled to obtain an article that is always of an uniform strength and may be relied on, and not like the present antimonial preparations in use, so much so, that many of our physicians think it matters not whether they exhibit ten grains or seventy grains, the result being pretty much the same.

I am, Gentlemen,

Your obedient and obliged servant,

J. H. HORNE, Surgeon.

5, Gerrard-street, Soho-square.

March 26, 1835.

DEAR HORNE,—You request me to give you my opinion of your acetum opii sedativum. In consequence of broken rest, arising from a long attack of chronic rheumatism, I have again accustomed myself to the use of laudanum at bed-time, and am in the habit of taking from 50 to 70 drops at a time, I had no hesitation in taking 25 drops of your opium; but this I found too much, producing all the symptoms which affect me by an over dose of laudanum, namely, an extreme headach all night, disturbed sleep, and total loss of appetite at breakfast time; it was not until the afternoon that I recovered from the effects of it. However I have taken it several times since, but in quantities of not more than 15 drops, and this I find sufficient; I have no doubt but that it is full three times stronger than any laudanum I have before taken. I find, too, its effects last for a longer time.

J. W. Horne, Esq.

PLAGUE IN EGYPT.

THE plague is raging to a frightful extent in Alexandria, and in Egypt generally, and it does not appear government has taken sufficient sanitary measures to prevent the introduction of this dreadful malady into this country, at a time when the importation of cotton from Egypt affords so many opportunities. There were several vessels loading at Alexandria for England and Scotland at the time 80 or 90 persons were dying per day at that place of the plague.

THE

London Medical and Surgical Journal.

Saturday, April 4, 1835.

COUNTRY MIDWIFERY ; FATAL CATASTROPHE—CORONERS' INQUEST—MANSLAUGHTER—RESULT OF THE TRIAL.

OUR readers will recollect that, in a leading article of our last number, we deprecated, in opposition to a contemporary journal, the admission into office of half nurtured and ignorant practitioners in our rural districts. A case has now been submitted to us, illustrating the propriety of our caution, supporting our argument, and well calculated to open the eyes of the public as to the sort of professional men they should employ.

At the Borough Assizes, held in Leicester on the 21st ultimo, William Sutton, aged 50, was charged by an indictment upon two counts; first, with having caused the death of Ann Gilbert by the *improper* and *violent* use of his hands upon her person, in attempting to deliver her in childbirth; and, secondly, by the verdict of manslaughter, *brought in by the Coroner's Inquest held upon the body of the deceased.*

William Sutton pleaded *Not Guilty.*

It appears, from the evidence of the first witness, Sarah Inskip, a widow and midwife, that she knew the deceased Ann Gilbert, and was engaged to attend upon her, and that she went for that purpose on Sunday night, 14th December last. The deceased was then in labour, her pains, however, did not increase so much as they should have done, and at six o'clock in the evening she was put on the bed. *The hand of the child first made its appearance, and it was alive, as the witness felt the fingers to move.* There were two

other women besides the witness in the room. This witness, upon perceiving that unaided she could not bring the child forth, requested one of her companions to go for Sutton, as he was the nearest *practitioner*. The woman went and brought Sutton back with her without delay. The midwife told him her difficulty, and begged him to *try*. The man Sutton proceeded to make an examination, and announced that he could deliver the deceased, but that the labour would last *an hour* longer. He tried and tried *from about half-past eight to twelve o'clock*; during this time he appeared attentive and never left the room. *He gave her a powder in a little warm water, and then her pains became freer*. The patient frequently expressed her doubts of his ability,—but he still continued his attempts: never said whether the child was alive or dead; at length, however, between twelve and one o'clock, the witness became alarmed, and sent out for “better” assistance, and a Mr. Paget attended, who, after examining the parts, said, “he doubted the deceased had been *kept back too long*,” he, however, *forthwith delivered her*. The child was dead, and discoloured like a dead child. Mr. Paget treated the case as it ought to be treated, but the woman died next day. On cross-examination, this witness said she considered Sutton to have had, in one case, “*very good luck*,” he had beaten her in her business, and in one “*most difficult case had succeeded in bringing forth a breech presentation*.” She acknowledged that Mr. Paget had delivered the deceased *very quickly*, but that the hands of Sutton, during his attendance, were, for longer or shorter periods, continually under the bed clothes,—no one meddled with the patient after Sutton, except Mr. Paget.

Elizabeth Palmer, one of the women

in attendance, corroborated the above evidence, and added that she frequently asked Sutton “*if he could do*,” but received no answer. He seemed *to use force*, and the poor creature said, “she could not bear him.” This witness judged from appearances that Sutton used *much force*. He gave the deceased *two powders to take, one half an hour after the other, which seemed to do her harm, as her pains increased*. Mr. Paget came after Sutton had been five hours with the deceased. This witness received the child when born,—the arm was in a very shocking state, *it was bruised from the shoulder downwards, and there were marks of the prisoner's fingers upon it*.

Elizabeth Slack, the other woman in attendance, heard the deceased exclaim, that “*she could not be delivered under his hands*.” Sutton, upon this, told her to hold her tongue, “*as it would backen her pains*.” Upon these women suggesting the necessity of farther help, Sutton discouraged it. This witness was never out of the room, except when sent out for Mr. Paget.

Mr. Paget deposed, that he was sent for to attend deceased; he arrived at about two o'clock; Sutton was in the room. Found the deceased with labour pains upon her, *and the infant in a position in which it is impossible for a full grown child to be delivered: the arm of it was protruding externally, swollen, bruised, the skin excoriated, and the bone broken!* “*No natural means could have broken the bone in the then position of the arm, nor produced the excoriation*. A child in this state ought to be delivered by altering its position, the operation of turning should have been performed.” This witness suspected strongly “that an attempt had been made to bring the child into the world *by other than natural means*; he

drew this inference from the contusions on the shoulder and the chest, these parts were swollen and livid." This witness examined the body after death in the presence of another surgeon, Mr. Stallard. They found the injuries which, in their opinion, caused death; the *laceration was in the side of the passage* (vagina), a laceration sufficient to cause death in the witness's opinion.

The *ocular proof*, however, of violence here was not made out, the prisoner was therefore acquitted of manslaughter, and retired, no doubt, with the consolation of knowing that his *skill* would in future be pretty accurately appreciated in the district where he *practises*.

In looking over the evidence in this lamentable case, the most striking point is the testimony of Sarah Inskip, the midwife. She had attended many cases of labour, and, although one of those persons who scarcely ever send for the surgeon until irremediable mischief has occurred, her evidence proves that in this case it was the hand of a *living* child which was protruded; and, finding herself unable to accomplish the delivery, she had recourse in her difficulty to Sutton, whom she had known before "*very lucky*," but whom she acknowledged to be *not* the most eminent practitioner in the place. (We add, God forbid!)

Now in a case of "arm presentation," which this was, and the child being alive, what was the most advisable course to adopt? Ambrose Paré's words are "that in all cases where the upper extremities present, turning must be had recourse to, and the child be brought down by the feet; and that if the midwife cannot accomplish this, she must send for a medical man who can."

Ambrose Paré, however, when he gave this injunction, although he might have

had Sarah Inskip in one eye as a midwife, most assuredly *had not* Sutton as a surgeon in the other; for how does the latter act in the emergency?—Why instead of proceeding *instantly* to turn, or if the contractions of the uterus would not allow of immediately turning, taking measures to relax the pains and procure their cessation for a while, by bleeding or opiates, or both combined, he takes the opposite method, and unwitting that such a presentation, unless altered, could never be delivered, encourages the action of the uterus, and renders the case at last hopeless! "He gave her a powder (probably ergot of rye, as Mr. Paget conjectured from its effects), in a little warm water, and then her pains became *freer*." No doubt they did; and no doubt the *surgeon's* manipulation became freer too, and the poor woman was kept on the rack of agony and suspense, doubting the efficiency of her assistant (a cruel doubt for one in her situation), as well she might for four or five hours! And this culpable trifling with the safety of a fellow-creature was continued until Sarah Inskip, in spite of her confidence in "*his luck*," became alarmed, and sent out for what she should have sought in the first instance—"better assistance." That assistance, though too late to save the life of either mother or infant, came at last. Mr. Paget arrived, and after examining the patient's parts, expressed his doubts that she had been "kept back too long," but forthwith, going the right way to work, he effected her delivery. That the infant was born dead, and discoloured "like a dead child," we think no one who reads the evidence can wonder at, nor will they wonder that the unfortunate mother died on the next day. But their surprise may be well excited that the tragedy should have been allowed to go on to this extent

when *effective help* might have been so quickly obtained; that when, according to the evidence of Elizabeth Palmer, *much force appeared to be used*, powders which increased the fruitless pains given, and the poor victim, guided by the instinct of nature, expressed her conviction that she could not be delivered under Sutton's hands, his efforts should have been longer permitted. These are matters for wonder, disgust, and abhorrence.

Again, if, after what has been said, any doubt can remain in the mind of the veriest tyro in obstetrics, that Sutton both misunderstood and mistreated this case, the evidence of Elizabeth Slack and Mr. Paget must at once dissipate it. The former says that, in answer to the poor patient's remonstrances, Sutton told her to "*hold her tongue as it would backen her pains*," thus displaying his ignorance of the proper method of treating the case; he also disapproved of sending for farther assistance. Mr. Paget's evidence we will not repeat; but it amply proves the extent of ignorance and heedlessness of consequences which contended for predominance in the mismanagement of the "lucky person" whose conduct has given rise to these remarks. We had almost forgotten to say he was found "not guilty."

The post mortem examination by Mr. Paget and Mr. Stallard we conclude our readers will duly appreciate: it proves much. We trust also that they will unite with ourselves in hailing the prospect before us of a speedy termination, by legislative enactments, to the impunity with which the unlicensed and untaught have hitherto practised our profession.

REGULATION FOR THE APPOINTMENT
OF SURGEONS TO VESSELS CARRY-
ING OUT EMIGRANTS.

IN our number of the 14th ult. our readers may recollect we made some observations on the neglect of government in not affording sufficient protection to emigrants during their transmission to our colonies. We then enumerated many of the defects of the system now carried on, exposed its abuses, and recommended such alterations and amendments as appeared to us essential.

We are now happy to announce that, since the article alluded to appeared, a bill has been brought in by Mr. Baring on the subject, embodying many of our suggestions therein stated, and calculated to serve the cause we advocated most effectually. In this bill provision is made for the more ample accommodation of passengers sailing from any port in the United Kingdom, or its adjacent islands, to our settlements in North America. The number of passengers is specified according to the burthen of the vessel, and the height between decks named, but not finally settled, that being left to be determined in Committee.

We may here observe, that the height named—five feet and a half—is too low; it should be *at least* six feet, and this could be as easily managed as the lesser figure. The height of the lower tier of berths from the floor of the deck ought also to be six, instead of three inches, as set down in the bill, for the purpose of affording room to clean underneath when necessary. The quantity of provisions, so far as relates to the indispensables of bread and water, is also *named* on a sufficiently liberal scale: about a gallon of the latter and one pound and a half of the former per diem to each passenger.

We could wish that the other provisions were also subjected to regulation.

We now come to that part of the bill which most interests our profession; it enacts that a physician, surgeon, or apothecary is to be carried, *rated on the ship's company*, whenever the number of passengers amounts to, or exceeds, one hundred, or, if under one hundred, sufficient medicines to be provided; this to be attested by two competent medical men. On this clause we must be permitted to remark, that allowing vessels to proceed to sea without a medical practitioner, when the number is less than one hundred, does not seem to be wise or justifiable. A master having 99 passengers would avoid taking the 100th, and thus defeat the object of the Act. This clause is not clear, also, as to whether the crew are included in the number; at all events it ought to be fixed at not more than 50. A former law, but not now enforced, limited the liability to ship a surgeon, for the vessel's purposes, to that number. We hope to see this altered when the Bill comes under Committee.

Another clause specifies, that two children, each under 13 and above 7 years old, or three children, each under 7 years of age, are to count as *one passenger*. This mode of rating, as regards room and provisioning, might be passable; but, as to *medical attendance*, it is bad; for we presume that the health of a child ought to be as fully provided for as that of an adult. A slight alteration in the clause, excepting its application in this point, would, we suggest, be desirable as well as reasonable.

There are many other clauses in the Bill, exceedingly well adapted to protect and ensure proper treatment to that hitherto scandalously neglected and ill-used portion of emigrants whose pecuni-

ary means are contracted; and we view with delight the safeguard thus proposed to be thrown around them. It is a proof that there is still some humanity left among the framers of our laws. One word more. This Bill does not extend to the regulation of vessels carrying passengers to Australia. Why is this? We know that abuses of the most desperate nature are perpetrated on board such vessels. The passage is thrice as long as that to our North American settlements, and a great portion of it is through a more oppressive climate. We know, also, that the grasping cupidity of the caterers for passengers to this part of the world is to the full as great as that of those engaged in the traffic proposed to be amended. We may recur to this point; but in the meantime rejoice in what has been gained, and sincerely hope to see the system, not long hence, reformed altogether.

DEATH OF DR. MATON.

WE regret to have to announce the sudden death of Dr. Maton, aged 61, which took place on Monday, soon after he had been paying a professional visit to the Duke of Sussex. Dr. Maton was a great favourite with the late Queen Charlotte and the other members of the Royal Family. He was an excellent scholar, and ranked high in the profession, as a physician and botanist. He translated Linnæus, and was a Fellow and Elect of the Royal College of Physicians. In private life he was an amiable, kind-hearted man, and paid upwards of seventeen thousand pounds for his late father, who had been Chamberlain to the Corporation of Salisbury. He was a constant patron of merit wherever he could discover its indications, and it was principally to his fostering

hand that Dr. Paris owes his being first brought into public notice. He was a bachelor, and amassed a considerable fortune. He held the office of Physician to the Westminster Hospital for many years.

NATIONAL VACCINE INSTITUTION.

It is with much pleasure we have perused the last report of this truly noble institution. It states that only 334 deaths from the small-pox have occurred in the metropolis within the last year; a number considerably less than have died in any year since the introduction of vaccination, and falling short, by at least 4000, of the average of deaths annually by small-pox, before the protecting influence of the cow-pox was discovered and promulgated by the immortal Jenner.

“Such a diminution of mortality by small-pox it is fair to attribute to the now almost universal adoption of vaccination, and we feel grateful to the provident liberality of Parliament for having maintained this Establishment in such authority and usefulness as enable it to answer every demand when and whencesoever presented to us, to supply the material for vaccination. Accordingly we have done so to forty-two applications from the Navy, to thirty-four from the Army, to fifty-three from Foreign Stations, and one hundred and seven from Dispensaries established in various towns of the country; and we think it right to mention, that all these Dispensaries acknowledge their belief, from experience, that nothing less than an Institution upon so large a scale as this national one can be depended upon to supply the authentic material for vaccination, at all times and on all occasions when it is wanted, with certainty and success.

“We have vaccinated of the poor last year 11,571, and have sent 83,191 charges of lymph.”

British Hospital Report.

WESTMINSTER HOSPITAL.

Cases of Erysipelas.

CASE I.—*Erysipelas Traumaticum*.—George Beazeley, *ætat.* 35, by occupation a bricklayer, was admitted June 11th, 1833, under Mr. Guthrie. In the commencement of May last, he received a severe contusion on the left leg from a brick, which was thrown at him, and to which injury he paid little attention, except applying poultices. He continued at his work until a few days prior to admission. About that time an attack of erysipelatous inflammation came on, com-

mencing, he says, in the groin, and running down the limb on the inside, as far as the contused part. He does not know any cause for the attack; had not been engaged in drinking previously, nor is he in the habit of intoxicating himself. He has had occasional rigors for the last two or three days; complains of severe pain across the brow, and burning pain in the limb affected; has not any appetite, but great thirst; tongue covered with a dirty brown fur; pulse small, quick, and frequent, 90; bowels open; stools *foetid*; cannot sleep; countenance anxious; wanders occasionally; the wound is in a very unhealthy state, approaching to sloughing; foot and leg swelled, with well marked erysipelas extending up the inside of the thigh, where the tumefaction is not so great.

The house-surgeon ordered aperient medicines and fomentations to the part. Was seen by Mr. Guthrie the same morning, who directed flour to be applied all over the parts affected with erysipelas, except the wound, which was to be poulticed.

R. Liq. ammon. acet. ℥ij.,
Carb. ammon. ℥iiss.,
Mist. camph. ℥vj.,
Tinct. opii. ℥ij.—Misce.

Fiat mistura, capiat coch. larg. ij., 8us horis.

12th. He passed a better night than he has done latterly; he wandered a little; however, he says he has less pain, both in the limb and also in the head; bowels have been freely opened; pulse is small, weak, and irregular, too rapid to be counted; considerable anxiety and depression of spirits; the erysipelas appears to be extending up the body, towards the arm, and across it to the other thigh; complains also of sore throat, for which he was ordered a gargle of ℥vij. inf. rosæ, and ℥j. potass. nitrat.

R. Ammon. subcarb. ℥iss.,
Tint. cinch. c. ℥j.,
Decoct. cinch. ℥vij.,

Fiat mist., capiat coch. larg. ij., tertiis horis.

Is ordered port wine, ℥vj. daily, and beef-tea ad libitum.

Half-past two, p. m. Pulse still very rapid and irregular, but it can be counted, 140; tongue cleaner, edges red.—Cont.

Half past seven, p. m. Pulse 132, irregular, but has more power; the sore on the leg is sloughing, but the man appears, on the whole, somewhat improved.—Capiat coch. larg. ij. mist. 2ndis horis.—Brandy ℥vj. daily.

13th. The erysipelas has invaded the pubes, scrotum, and upper part of the right thigh; vesications, containing a light straw-coloured fluid, on the left leg and thigh; eyes inflamed; dryness and inflammation of the fauces;

bowels open; stools still offensive; urine little in quantity, and high-coloured; features continue to wear an expression of great anxiety, and appear to be assuming the Hippocratic cast; he passed a very bad night; skin hot and dry: pulse small and weak, 140.—Cont. mist., adde ammon. subcarb. gr. iv. ad sing. dose.

14th. The night was better than the preceding one, although he slept but little; towards morning he began to wander, and tried to get out of bed; pulse small, and somewhat intermittent, 108; typhoid symptoms are becoming more and more evident; the phlyctenæ are larger, the fluid they contain darker; sphacelus is taking place around the wound, indeed the whole of the soft parts in the neighbourhood presents a boggy feel, and seem inclined to sphacelate; the patient is troubled with hiccough; there appears to be greater tumefaction of the limb; sordes about the teeth, hips, and tongue; the offensive character of the stools continues.—Cont. mist.

7 P. M. The sphacelus is spreading, and he is apparently sinking.

15th. Bad night, but appears to be a little improved this morning; water drawn off by the catheter last night; pulse less intermittent; slight moisture on the body; the patient is comatose. Mr. Guthrie and Mr. White saw him within half an hour of each other. Mr. G. ordered him to continue his medicine, and directed some musk to be added to the mixture, without expressing any opinion as to the termination of the case, which Mr. White considered would be favourable.

8 P. M. Is now rapidly sinking; the body and extremities are cold, and the pulse almost imperceptible; breathes with great difficulty, and continues moaning.

Died at 2 A. M. on the 16th.

Autopsy.—Erythematous blush over the greater part of the body; sphacelated spots on different parts of the leg and thigh; cellular tissue of the left leg sloughing, and infiltrated with a thick tenacious pus, which could be pressed out; coats of the left femoral vein thickened, but not otherwise diseased; the whole of the cellular tissue of that extremity loaded with bloody serum; the bone was not injured; the brain and its meninges were injected, and serum effused under the membranes; old adhesion between the pleuræ, and the left lung was gorged with fluid; abdominal viscera healthy.

CASE II.—*Erysipelas—Application of Leeches*.—Jane Hall, ætat. 23, was admitted into Anne's Ward, under Sir A. Carlisle, June 25, 1833. Three weeks previous to admission, she struck her foot against a stone, and broke the nail of the great toe, which excited some inflammation in the part, followed by suppuration. On the 23rd of this month, a blush of erysipelatous inflammation

showed itself, principally on the inside of the leg, running up the calf, and partially extending to the outside of the limb, also on the inside of the thigh about half way up, attended with considerable pain, heat, tumefaction, and tension of the extremity; pulse small and frequent, 96; tongue rather furred; bowels confined; no headach.

26th. Seen by Sir A. Carlisle, who ordered a poultice to the toe, twelve leeches, if possible, to be fixed on the very centre of the inflammation, which he directed to be covered with flour directly the leeches dropped off; a fracture cradle was placed over the limb, so as to keep the bed-clothes from it; he also ordered alkalies internally. This latter part was accomplished by giving a wineglassful of Sir A.'s mixture three times a-day.

27th. The erysipelas appears to be of a paler hue where the leeches were applied, and is certainly not extending; bowels well open; flour but scantily applied. Continue mist., et reapplic. farinam.

29th. Is much improved; the erysipelas has nearly disappeared, but just below the knee there is a circumscribed patch of inflammation, as if it were about to terminate in abscess; to be poulticed. An abscess formed, was opened, and healed; the latter part was rather protracted, in consequence of a second attack, a slight one, of erysipelas, owing to the application of strapping, which yielded to rest, purgation, and flour. She was dismissed August 13th.

CASE III.—*Erysipelas Traumaticum*.—*Leeches*.—Eliza Davis, ætat. 20, admitted Sept. 24, 1833, under Mr. White, for pustular inflammation of the cornea. Is subject to inflammatory attacks, chiefly affecting the lungs and the eyes. Various treatments were adopted. On the 4th October she complained of great pain in the eye, which was very vascular; in consequence, an incision was made in the left temple, but the blood came so slightly, that a cupping-glass was applied over it, and $\bar{3}$ xvj. of blood taken. The black ointment was then applied every other day, with the effect of removing the vascularity, and nearly clearing the cornea. While she was thus satisfactorily progressing, symptoms of inflammatory fever set in. On the 14th she complained of great pain in the head and limbs, with tightness of the chest; bowels not open; thirst and heat of skin; pulse full, throbbing, and frequent; had had two of Mr. Lynn's pills, which had not yet operated.—V.S. ad $\bar{3}$ x.

Hæst. Sir A. C. $\bar{3}$ iss.

Mist. salin. capiat coch. larg. ij. tertius horis.

15th. She feels almost constantly sick, and can keep scarcely any thing on the stomach; complains of great pain and tenderness of the scalp; inflammatory blush on the left temple, extending down the cheek; bowels freely

opened; pulse not so throbbing, but still full and frequent.—Ordered a poultice to the temple, and to have an effervescing draught three times a-day.

16th. Complains of pain in the head, body, and limbs; general soreness; erysipelas has attacked the left temple, cheek, and ear, also extending behind it; tumefaction of left eyelids, almost closing up the eye; is very feverish; tongue furred; pulse frequent; bowels very open by the medicine she had last night, being hyd. subm., pulv. antim. $\bar{a}\bar{a}$ gr. v.; ten ounces of blood were also taken by cupping from the nape of the neck; to have powder containing calomel and jalap, and continue the poultice; flour to the face.

17th. The erysipelas appears to be extending all over the face, which is very much swelled, partially covered with flour, the eyelids of the right eye are also tumefied; has constant pain in the head, for which, with the heat and tenderness of the scalp which existed, the head was shaved, and cold lotions applied; sickness continues; pulse small, but very rapid, 110; bowels not very open; constant thirst; says she cannot open her mouth so as to show the tongue.—Ordered pills of calomel and colocynth directly. Mr. Guthrie saw her to-day, and thought it a good case for the punctures, as recommended by Sir Richard Dobson.

18th. Has been occasionally delirious during the night, but is more sensible at present; did not sleep at all during the night; the punctures were not made, but two dozen leeches were applied to the temples yesterday evening; the erysipelas is not extending; pulse rather small, but quick and frequent; thirst and sickness continue; the leeches bled freely, and have not yet quite stopped.

19th. Passed a better night, but still wandered somewhat; was talking nearly the whole night; inflammation paler, and she is more sensible; bowels open; less heat of skin, and the frequency of the pulse is diminished; the eyes were examined, but were found to be unaffected by the disease.—Instillet. gutt. ol. oliv. Cont. Brandy, $\bar{3}$ iv., an ounce every three hours.

20th. The inflammation is much lessened on the face, and there is less tumefaction; the eyelids are less swollen, and she can separate them a little; she has less pain and tenderness of the integuments; the upper lip is very much swollen, and she complains of her mouth being sore; bowels not very open; slept but little during the night; continues sensible; the inflammation appears to be extending at the back of the neck, where it has a very defined termination.

21st. Had a better night; erysipelas rapidly disappearing from the face, but appears to be extending on the nucha, and also towards the throat; says the soreness of the mouth is lessened; the upper lip is less tumefied, and she can protrude the tongue better; it is covered

with a white fur; pulse quiet, of moderate strength, 90; no tenderness of the integuments of the face or the scalp, which is now transferred to the nucha, where she cannot bear the slightest pressure; bowels open.

22nd. Continues to improve; no tumefaction of the eyelids, and scarcely any of the face; bowels open; tongue still furred; pulse regular, but not full; good night; flour to the nape of the neck.

23rd. The inflammation at the back of the neck is evidently not extending, and she is altogether improving.

R. Acid. sulph. dil. $\bar{3}$ j.

Decoct. cinchon. f. $\bar{3}$ vj.

Tinct. cinchon. c. f. $\bar{3}$ j.

Capiat cyathum vinosum bis in die.

The four ounces of brandy to be continued daily.

From this date she gradually improved, but gained strength very slowly; the inflammatory affection of the eyes returned, and a seton was put in the neck.

CASE IV.—*Erysipelas—Use of the Ung. Hydrarg. Fort.*—John Kelly, \bar{a} etat. 11, a boy of a strumous habit of body, a patient of Mr. Guthrie's in John's Ward, had the right leg removed for white swelling of the knee-joint. The stump did not heal entirely, and he continued in the hospital for several months. A small unhealthy ulcer remained on the face of the stump which nothing could induce to heal. On the 4th of the September following, an attack of erysipelas took place on the face of the stump attended with considerable fever, flushed face, heat of skin, thirst, quick pulse; was ordered salines and aperients; to keep in bed and be placed on low diet.

5th. The medicine had acted well, but the febrile excitement appeared on the increase. To continue the medicines, and the stump to be enveloped in a poultice.

6th. The fever continues unabated; the inflammation is spreading up the thigh, and is covered with small vesications, containing a straw-coloured fluid; bowels open; tongue furred; pulse quick and hurried.—Cont.

7th. No improvement; was seen by Mr. Guthrie, who directed the application of the blue ointment, and, if that did not arrest it, a line of demarcation to be formed with the nitras argenti.

9th. The ung. hydrargyri has been freely applied, but has not arrested the progress of the complaint; the erysipelas appears to be spreading through the ointment, and receding from the surface of the stump, the vesicles which had been formed there drying up.—Rep. ung. hyd.

13th. The erysipelas has been gradually dying away, and the poultice is now to be omitted.

15th. The inflammation is again spreading.—Rep. ung.

18th. The erysipelas has disappeared; placed on full diet.

CASE V.—*Erysipelas Traumaticum*.—*Line of Demarcation by the Nit. Arg.*—John Stockley, ætat. 24, a journeyman butcher, residing in High-street, Marylebone, was admitted Sept. 15th, 1833, under Mr. Lynn. On Monday, the 9th inst., while engaged in taking down, in a hurry, a piece of meat from a hook in the front of his master's shop, he drove his right hand on one immediately below, which entered it on the back part, between the second and third metacarpal bones. He paid no attention to the wound, but continued to work until the 11th, when considerable inflammation, with tumefaction and great pain, came on, and shortly ran up the arm; the pain was so severe as to prevent his sleeping; he applied poultices, and had but little other treatment, until he entered the hospital on the 15th.

On admission, there was considerable erysipelatous inflammation of the hand, extending up the fore-arm, and a little above it; great tumefaction and increased heat of the part, attended with considerable pain and fever; thirst; pulse full and frequent, 96; pain in the back and limbs; tongue furred; bowels open; no headach. A circle, at least half an inch wide and apparently deep, was made around the arm by the nitras argenti applied about an inch and a half above the inflammation; thirty-six leeches were applied to the fore-arm, to be followed by fomentations, aperients with diaphoretics and small doses of tartarised antimony.—Low diet.

16th. Fluctuation is evident on the dorsum of the hand, on which an incision was made, but the integuments being much thickened it was necessary to repeat it ere the pus could be evacuated; about three ounces were discharged, which were not contained within the walls of an abscess, but diffused in the cellular tissue of the hand, and removed by pressure; the erysipelas is not extending beyond the line of demarcation; bowels open. Poultice to be applied over the whole hand, and continue the fomentations for the arm.

17th. Says he passed a bad night and was in more pain, but was relieved by the fomentations; the bowels have been open eight times in the course of the day; considerable discharge from the wound in the hand; inflammation on the fore-arm much paler; healthy inflammation forming around the eschar produced by the nitras argenti; the pulse is not so full, but is still frequent, 96; tongue covered with a yellowish fur. *Middle diet.*

18th. Was seen to-day by Mr. Lynn, sen., when the inflammation on the fore-arm had entirely disappeared, considerable discharge continuing. He considered that the case was not erysipelas.

19th. Poultice continued to the hand, and also one around the eschar. The fore-arm is quite recovered.

21st. The eschar produced by the nitrate peeled away to-day about three lines thick. Is doing well. Continue.

24th. Simple dressing applied to both places, which are healing.

27th. Nearly well.

28th. Discharged.

CASE VI.—*Erysipelas Phlegmonodes*.—Elizabeth Harper, ætat. 30, a washerwoman, and married, was admitted an out patient Nov. 28th, 1833, under Mr. Guthrie, with phlegmonoid erysipelas of the left arm. The disease did not occupy the whole of the arm, but only the outer part near the elbow, above and below it, and indeed all around it, with the exception of the inner part. The inflammation was severe, of a rose-red colour or rather darker, but not so deep as that of erythema, and the swelling very evident; the boundary of the swelling and redness well defined; the swelling pitted on pressure; and she said that the pain was so very great as to deprive her of sleep; is feverish; pulse quick and frequent; bowels open. Several incisions, three or four inches long, were made through the integuments into the cellular tissue, but not deeper. Some small arteries were divided, and bled rather freely; eight ounces were thus drawn; the redness of the arm was thus nearly removed, and the swelling very much diminished; the pain, before so acute, was scarcely perceptible.

The loss of blood made her feel faint. She was strongly advised to enter the hospital, but she would not agree to it.

R. Hydr. submur., pulv. antim., āā gr. v.
Pulv. jalapæ, gr. x.—Fiat pulv. statim.

R. Haust. efferv. ʒ iss. 2ndis horis postea sumend.

Simple dressing to the wounds, and cold lotion to the inflamed part.

30th. Did not attend yesterday. Suppuration is freely established, and she is in very little pain; the cellular tissue had rather an unhealthy appearance; pulse quiet and rather small; bowels open; slept well.—Ordered linseed-meal poultice, diaphoretic mixture, and cathartic pills. Owing to the irregularity of attendance, the notes of her case were not continued. She went on very well.

CASE VII.—*Erysipelas Phlegmonodes*.—Thomas Tooley, ætat. 50, a coal-heaver, of a sanguineous temperament, middle size, and rather stout; a great porter drinker; slipped down an area on the 16th of September, 1833, while carrying a sack of coals, and fell on the left hand and arm. He came immediately to the hospital, where the limb was examined, and found to be much bruised and lacerated, but not sufficiently so to warrant his admission as an in-patient; the bones were not broken. He was ordered aperient medicine, low diet,

to keep quiet, and to have the parts constantly wet with cold lotions. This plan was pursued for the next two days, but on the 19th his wife accompanied him to the hospital when he came to show himself, and reported that he had passed a very bad night, and was delirious. The whole hand and fore-arm were very much tumefied and inflamed; the integuments presented a doughy feel on pressure; the pain was constant and severe. A remarkable circumscribed tumour existed on the outside of the arm just below the elbow, elevated considerably above the integuments, and about the size of a penny-piece. Sensation of fluctuation very distinct on the outside of the arm; and he says he has had several rigors within the last thirty-six hours; indeed, shiverings are almost constant. The lacerated wounds on the hand and wrist are suppurating, but the discharge is unhealthy. Pulse quickened and frequent, 110; tongue clean; bowels open; skin hot and dry. An incision was made into the circumscribed tumour already mentioned, which bled very freely. He was immediately admitted an in-patient, and placed in Percy Ward, under the care of Sir Anthony Carlisle. He was ordered the diaphoretic mixture with aperient, and put upon low diet; the whole arm to be enveloped in a linseed-meal poultice.

20th. He passed a very bad night, unable to sleep. Two incisions were made by the house-surgeon, on his visit this morning, on the back of the hand, and one in the arm, through the fascia, giving issue to a considerable quantity of pus; the incisions bled freely; he was much relieved; is now sensible; pulse small, quick, and frequent, 100; bowels freely open by medicine.

21st. Passed a better night, but otherwise no improvement; discharge very considerable and rather fetid; pulse smaller.—Full diet.

R. Sulph. quinin. gr. x.; infus. roseæ c. fl. $\frac{3}{4}$ viij.—Capiat coch. ampl. ij. 3tiis horis. Anodyne at night.

22nd. Improving; pain lessened, and feels better.

24th. The pus appears to accumulate at the elbow, in consequence of its being placed lower than the hand: the elbow was accordingly raised by pillows, so that the hand became the depending part.—Pint of porter daily.

25th. An incision was made at the elbow, and the pus evacuated—discharge great. The pulse is stronger, and he looks better.—Adde sulph. quinin. gr. x. mist. To have half a pint more porter in the day.

26th. The discharge still appears to be burrowing in various directions: a considerable quantity can be evacuated by pressure. The two wounds in the hand were made into one by a cross-cut; the tumefaction is diminishing.

28th. Is much improved; discharge frec. Sir A. Carlisle thinks the poultice should be

discontinued, and the wounds dressed. The arm to be supported by strips of adhesive plaster, placed at the distance of an inch between each so as to allow a free vent for the matter. Pulse strong and regular.

Oct. 5th. Sir A. Carlisle has stopped all the stimuli and tonic medicines he was taking. Is restless and delirious, and there is a slight appearance of sordes about the teeth and lips; the discharge is greater, and he complains that the pain has increased very much.

Brandy, wine, and ammonia, were soon again had recourse to, but unavailingly; he continued to linger for some days, the symptoms becoming more and more typhoid, and the arm putting on the appearance of approaching sphacelation; the discharge sanguinolent and thin; the sordes increasing; great prostration; low muttering delirium; tongue dry, and covered with a brown fur; with a small and irregular pulse, marked the close of his life. On the 9th he was removed into Mark's Ward, but he was too far gone to derive any benefit from the freer circulation of air. Diarrhœa came on on the 16th, and he sunk the next day.

Autopsy.—Body very much emaciated. Head not examined. Chest—old adhesions of the right pleura; lungs loaded with mucus; heart healthy. Abdomen—Liver enlarged and granular, paler; gall-bladder distended with bile of an unusually pale colour: it contained ten gall-stones; other viscera apparently healthy. Left arm—Soft parts in a state of sphacelus; bones uninjured.

CASE VIII.—*Erysipelas Erraticum.*—Hen. Wren, æt. 25, was admitted, Nov. 19, 1834, into Northumberland Ward, under Mr. W. B. Lynn. Is a man of a bad habit of body and intemperate. About ten days previous to admission a woman threw a jug at him, by which he received contused wounds on the forehead and wrists. He attended this hospital as an out-patient, and the injuries were properly dressed. He says that he abstained from drinking after this. On the 17th he felt worse than usual, and he passed the succeeding night in pain, and was very restless, the scalp having become the seat of erysipelas. On admission, the inflammation was found to affect the right side of the forehead and the scalp, the eyelids of that side participating, evinced by their tumefaction, discoloration, and closure. The head was shaved, and fomentations applied. Adhibeatur haustus cathart.

The fomentations were omitted next day, and flour applied; the inflammation was extending; the pulse small, about 90; tongue slightly furred; bowels freely opened by the cathartic.

R. Carb. ammon. \mathcal{D} ij.

Dec. cinchon. $\frac{3}{4}$ iv.

Aq. cinnam. $\frac{3}{4}$ iv.—M.

Fiat mist., capiat. $\frac{3}{4}$ j. quartis horis.

21st. Was rather delirious during the night,

but is perfectly collected at present; the inflammation is disappearing on the right side of the head, but is invading the left, the left palpebræ being tumefied and closed; tongue more furred; bowels not open.—Hæbent pulv. aper.

22nd. Bowels well open by the medicine; scap more tumefied; tongue continues furred; pulse 100, very small; was delirious during the night.

23rd. Passed a better night; the tumefaction is diminished; the pulse is stronger, 96, and the tongue cleaner.

26th. The inflammation is now spreading down the face; the eyelids of each eye are much tumefied and inflamed, and appear as if vesicular. He complains of great soreness and pain, and cannot bear the slightest touch. He passed a restless and disturbed night; pulse 86, small and frequent; bowels open, stools yellow; tongue white; headach.—Ordered to continue the flour to the head, and to foment the face; to have small doses of the antim. tart. and cordials; olive oil to be dropped in between the eyelids.

29th. Inflammation lessened, and he is altogether improving; less headach; pulse stronger; tongue cleaner; lids less tumefied, and can be separated a little.

30th. Passed a good night, and is free from pain; is very much better; the inflammation is going off, and the pulse improving. The left upper eyelid has a small point of ulceration in its centre.

Dec. 2nd. Continues to improve; the swelling is everywhere decreasing, and he is gaining strength.

7th. The ulceration of the eyelid is nearly healed.

Was discharged, cured, a few days after.

CASE IX.—*Erysipelas Phlegmonodes*.—Robert Potter, ætat. 25, was admitted Feb. 5, 1835, into Burdett Ward, under Mr. Guthrie. He is a sailor (the third mate of a West Indian), a native of St. Kitt's in the West Indies. While coming to England in his vessel about the middle of January last, was wrecked off the Western Islands, and in endeavouring to escape in the boat, injured the right leg against the gunwale. He was exposed to all the rigour of the weather for two days and two nights; he was then picked up by the Eliza, an American brig, and brought into Liverpool within a week after. He shortly after determined on coming up to London, which he accomplished on foot. Hitherto he had experienced no inconvenience from the injury to the leg, but, during the journey to town, it became very painful. Notwithstanding he did not lay by directly on his arrival, but continued to walk about for a few days, when the pain and inflammation became so severe, he was obliged to give in; nothing else than a cooling lotion was made use of.

On admission he was found to be labouring under erysipelatous inflammation affecting the

anterior and outer part of the right leg, the part inflamed being tumefied, and of a yellowish red colour; the swelling well defined, tense, and pitting on pressure; touching causes an increase of pain. The general symptoms are insomnolency, headach, inappetency, furred tongue, shivering, &c.

An incision of about four inches' extent was immediately made through the inflamed part, which afforded him instant relief, and removed the tension; the cellular tissue beneath was sloughing. A poultice was immediately applied, a dose of house physic ordered, and he was placed on low diet.

He slept well the next night, and the symptoms of general disorder soon ceased; the slough soon after began to be detached, and by the morning of the 9th was entirely separated; the discharge was healthy, and not abundant. In a few days more, the poultice was omitted, the lips of the wound brought together by adhesive plaster, and a roller applied; he was also put on full diet. No bad symptoms interrupted the progress of the cure, and he was dismissed, well, on the 24th.

ROYAL COLLEGE OF SURGEONS.

NAMES of Gentlemen who received Diplomas during the month of March, 1835.—John V. Lewis, Mark-lane; James Harris, Farninbury; Thos. W. Dyson, Manchester; John Brown, North-place, Kingsland-road; James Lyons, Co. Limerick; W. F. Clerk, Glenmuckle, Aberdeenshire; W. Henry Bishop, Cheltenham; Robert Falkner, Bath; George Isdell, Winchester; George W. Hunter, E.I.; Booth Eddison, Nottingham; Shewbridge Connor, Ireland; Johnstone Vicars, Exeter; Joseph Douglas, North Audley-street; W. Hall, Hatfield; Richard O'Shaughnessy, Limerick; John Gill, Huntspill; James O'Loughlin, Ballinasloe; John Dickenson, Wrexham; Robert Eddowes, Loughborough; James Orwin, Wakefield; Hugh Tod, Edinburgh; Henry New, Hatton Garden; Walker Golland, Manchester; Owen Richards, Bala, Merionethshire; Hugh Goold, London; W. Barnard, Bramdean, Hants; W. H. Jenner, Ware, Herts; Thos. E. Eden, Threadneedle-street; David Lawrence, Pontypool; Charles V. Field, Rotherhithe; W. Morrison, Newcastle-upon-Tyne; John Barrett, Corton Denham, Somersetshire; Morris Pritchett, Plymouth.

APOTHECARIES' HALL.

NAMES of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, the 26th March, 1835.—Samuel George Gregory, London; James Hindle, Norton; Edward Nolloth, —; James Parker, Tunbridge; Alexander Bridge, —.

MISCELLANY OF FACTS.

A Soft Water Company is now in full operation, but let them not become in their turn monopolists with freedom on their tongues; let them beware of that error. Their utility will ensure a handsome remuneration for their labour and outlay; whatever competition they may have to encounter, they should not show much less endeavour to crush.—It will not do.

Guy's pensioners under the Stationers' Company receive—some 1*l.*, others 15*s.*, or 10*s.* 6*d.* per quarter, but the total amount of pensions in the gift of this fraternity amounts to 300*l.* per annum.

Thames Water.—The number of common sewers which empty themselves into the Thames between Chelsea Bridge and the Tower is 88, exclusive of innumerable drains from streets, manufactories, and houses.

Sir David Barry has arrived in town from Ireland, where he was sent by the late government on a professional commission.

Medical and Physical Society of Calcutta.—The editors of a medical journal, recently started at Calcutta, soon after commencing their career, addressed a letter to the secretary of this society, containing suggestions with the view to establish a union between that journal and the society, which was read at one of the general meetings. A resolution was proposed and seconded, authorizing the secretary to enter into communication with the editors on the subject, but was met by a counter amendment, to the effect that the pub-

lications of the society should be continued as before, without reference to the *India Journal of Medical Sciences*, or any other publication. The amendment was carried.

WEEKLY BILL OF MORTALITY.

London, Tuesday, March 31st, 1835.

Abscess	4	Hernia	1
Age and Debility	44	Hooping-Cough	15
Apoplexy	9	Inflammation	39
Asthma	22	Inflammation of the	
Cancer	1	Bowels & Stomach	2
Childbirth	1	Inflammation of the	
Consumption	79	Brain	3
Convulsions	36	Inflammation of the	
Croup	9	Lungs and Pleura	8
Dentition, or Teeth-		Insanity	4
ing	2	Liver, Diseased	3
Dropsy	29	Measles	10
Dropsy on the Brain 13		Mortification	2
Dropsy on the Chest 2		Paralysis	3
Epilepsy	1	Small Pox	10
Erysipelas	2	Sore Throat & Quinsey 1	
Fever	15	Spasms	3
Fever, Scarlet	11	Thrush	1
Fever, Typhus	1	Tumour	1
Gout	1	Unknown	1
Hæmorrhage	1	Unknow Causes	11
Heart, Diseased	5	Stillborn	18

Buried, Males 200 Females 214 Total 414
Decrease in Burials reported this week, 74.

METEOROLOGICAL JOURNAL FOR MARCH.

Days of Month.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.		Winds.		Atmospheric Variations		
		7	8	9	29	30	56	57	W.	W.	Snow	Snow	Rain
1		37	39	34	29.62	28.71	56	58	W.	W.	Snow	Snow	Rain
2		35	49	35	29.87	28.76	53	57	N.W.	S.S.W.	Cloudy	Fine	Fine
3		17	48	37	29.42	28.63	57	51	W.	W.	Fine	—	—
4		39	48	35	29.65	28.97	51	53	S.W.	W.S.W.	—	—	—
5		37	52	42	29.71	29.62	53	55	W.	S.S.W.	—	—	Rain
6		41	50	41	29.13	29.45	55	54	S.W.	W.	—	—	Fine
7	F Q	43	49	35	28.85	28.88	54	51	S.S.W.	W.S.W.	—	Rain	—
8		41	45	40	29.06	29.45	51	56	W.	W.S.W.	—	Fine	Cloudy
9		44	48	35	29.17	28.85	56	55	S.S.W.	S.W.	Cloudy	—	—
10		35	50	39	29.21	29.51	55	60	W.S.W.	S.W.	Fine	—	Fine
11		49	52	43	29.31	29.51	60	62	S.S.W.	S.S.W.	Cloudy	Rain	—
12		47	50	36	29.51	29.51	62	59	S.	N.	Cloudy	Fine	—
13		17	19	12	29.91	29.98	59	58	N.W.	W.S.W.	Fine	—	Fine
14		45	53	45	29.73	29.81	58	57	S.	S.W.	Rain	—	—
15	F M	46	54	40	29.60	29.62	57	52	S.S.W.	W.	—	Rain	—
16		50	51	45	29.80	29.81	53	54	W.	W.	Fine	Fine	—
17		47	49	40	29.69	29.53	51	58	S.	W.	Rain	Rain	Rain
18		11	50	36	29.74	29.87	58	57	N.	N.N.E.	Fine	Fine	Fine
19		36	45	36	30.09	30.02	57	58	N.	N.	Foggy	Foggy	—
20		41	52	44	30.06	30.06	58	57	W.S.W.	S.W.	Fine	Fine	Cloudy
21	L Q	48	51	45	30.01	29.98	58	60	S.W.	N.	Rain	Rain	—
22		47	48	39	30.00	29.99	60	59	N.N.E.	N.E.	Cloudy	—	Rain
23		13	48	59	30.01	30.01	59	59	N.	N.N.E.	Fine	Fine	Fine
24		41	46	34	30.05	30.16	59	55	N.N.E.	N.E.	Cloudy	—	—
25		38	49	36	30.26	30.31	55	51	N.N.E.	N.	Fine	—	—
26		37	48	37	30.22	30.10	53	54	W.N.W.	N.N.W.	Cloudy	—	—
27		13	51	10	30.06	30.01	55	53	N.	N.N.E.	Fine	—	—
28		41	45	35	29.97	29.90	54	53	N.E.	N.N.E.	—	—	—
29	N M	42	46	35	29.85	29.81	53	50	E.N.E.	N.E.	—	—	—
30		36	50	36	29.63	29.57	50	51	E.N.E.	S.	Cloudy	—	—
31		44	54	43	29.55	29.53	50	61	S.	S.S.W.	Fine	Rain	Rain

The quantity of rain fallen in March was 2 inches.

50, High Holborn.

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CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At the Meath Hospital during the Session of
1834-5.*

LECTURE VI.

Case of Secondary Symptoms which made their Appearance soon after a Mercurial Course—Method of Treatment—Case of Syphilitic Eruption—Mouth suddenly affected by a small Quantity of Mercury—Effects of this on the progress of the Cure—Eruption preceded by Rigors coming on during the Course of Fever—Danger of Treatment—External Tenderness, Value of, as a Symptom in Inflammations of Brain, Lungs, Abdomen, &c., &c.—Vomiting considered as a Symptom in Fever—Its Treatment—Chronic Rheumatism—Successful Treatment of—Obstinate Case of Arthritis—Cure of, by Local Applications—Observations on the Effects of Mercury applied locally—Case of Syphilitic Iritis—Action of Belladonna in.

GENTLEMEN,—You have observed that we have two cases of syphilis under treatment, one in the female, the other in the male chronic ward. They possess no peculiar interest beyond the ordinary run of syphilitic affections, still they deserve a share of your attention; for it is on your experience of individual cases, much more than on the knowledge derived from books, that your treatment of this obscure and Protean malady will depend.

It is now more than a year since the female patient received the syphilitic poison into her constitution. What the nature of the primary sore was we cannot ascertain, but from the account she has given it seems to have been true chancre. Some time after this occurred she got sore throat, articular pains, and an eruption, for which she was treated in this hospital about ten months since, and dismissed apparently cured. The disease, however, returned in a few weeks, and she has been

labouring under its effects up to the present moment. Three circumstances in this case demand our attention; first, the reappearance of syphilis after a mercurial course, for she was mercurialised here soon after her first admission; secondly, she exhibits a degree of syphilitic cachexy, being rather pale and emaciated; and, thirdly, the slow progress which the disease has made in her system, being limited to a few blotches on the skin, some periostitic swelling of the bones of the leg, pains, and slight arthritis.

In treating this case, I intend to give mercury, so as to affect her system, and, having accomplished this, I shall keep her under its influence for some time. I shall also, should it appear necessary, order her a free allowance of the decoction of sarsaparilla. Under this treatment you will find that the eruption will soon disappear, the periostitic pains and swelling be removed, and the constitution begin to improve. She has been ordered three grains of blue pill and half a grain of calomel three times a-day, a quantity which you will generally find sufficient to bring on mercurial action in females. I have no doubt but that the disease will in this case yield to mercury in a very short time, and that her health will be completely restored. The failure of mercury in producing a permanent cure on a former occasion is no argument against its employment here; if there were no syphilitic taint in question, I do not know any remedy by which the cutaneous affection and the periostitis could be more effectually relieved. On another occasion I shall speak more at large upon this important subject, and shall bring forward facts in proof of the assertion that mercury may fail to eradicate the effects of the venereal poison at a certain period of the disease, and may nevertheless be capable of curing the disease effectually at a future time. This may appear paradoxical, but it is not the less true.

The other patient, John Kelly, presents an eruption of red scaly blotches extensively diffused over the trunk and extremities, and closely resembling psoriasis. This man, like many others, denies the occurrence of a recent, syphilitic taint, and gravely states that it is

some years since he exposed himself to infection. Instances of this kind are to be met with every day; patients will not tell the truth about these matters, and false statements tend to throw a darker shadow over a disease in itself sufficiently obscure. However, in this case the poison seems to have confined its effects to the cutaneous surface; there is no affection of the throat, periosteum, or joints. The eruption covers almost every portion of his body; it made its appearance two months before admission, and was preceded by feverish symptoms and pains in the larger articulations.

In undertaking the treatment of this case there is one practical point to be held in view. The man's general health is good, his strength undiminished, and his circulation active. I therefore ordered him to be bled, and have kept him for eight or nine days on antimonials and low diet. By preparing him in this way, I knew that the mercury which I intended to give him would act more rapidly on his system; and such was the case, for on the second day after he commenced using it his mouth became affected. But here a difficulty arose which in cases of this description is apt to embarrass our treatment,—the mercurial influence appeared much sooner than I expected or wished. He had been ordered three grains of blue pill and half a grain of calomel three times a-day, and on the second day, before he had taken six pills, salivation commenced. Now in all cases where mercury affects the mouth sooner than you desire, and as it were in spite of you, it will not do as much good as where its action proceeds regularly and in accordance with your purpose. It is a general rule that most benefit is to be expected from mercury where its action is regularly progressive, or where the quantity taken is in proportion to the effect produced on the system. Hence we look upon it as an unfavourable occurrence when a small quantity of mercury occasions sudden and copious salivation; such an event deranges our calculations, and tends to embarrass our practice. Now in this case the patient, after taking five pills, became salivated on the second day. We found we had been going on too fast; it was necessary therefore to pause, but not desist. We accordingly reduced the quantity of mercury to three grains of blue pill and half a grain of calomel, to be taken every second night. By these means we kept up a slight discharge of saliva, and the man's symptoms began to improve. The eruption is now disappearing rapidly, and it is to this point I wish to call your attention. What are the marks which indicate the subsidence of an eruption of this kind, and by what criterion are you enabled to judge of the progress of the cure? When the parts are about to return to their healthy condition three circumstances occur; first, the vivid red or copper colour of the eruption begins to fade; secondly, the heat of the affected parts becomes reduced; thirdly, the

excessive secretion of morbid cuticle is arrested, and the quantity of minute scales covering the blotches diminished. In such cases the affected parts of the skin are highly vascular, and the secretion of cuticle is morbidly excessive in quantity; hence the continued desquamation from the surface of the blotches. You should, therefore, attend not merely to the colour of the eruption, but also to the quantity of minute scales on each blotch, when you wish to ascertain whether an eruption is fading or not. You can judge of this by your eye, or you can tell it by passing your finger over the diseased surfaces. The fading of the colour of the eruption, the decrease of the elevation and roughness in the blotches, and the gradual disappearance of the minute scales, these are the circumstances by which you can ascertain the subsidence of a syphilitic eruption. As the cure progresses, you find the parts assuming a more natural appearance, the same quantity of morbid cuticle is no longer thrown out by the affected spots of corium, the blotches become smooth and lose their elevation, and, finally, the red colour of the skin disappears. Of all the symptoms, discolouration of skin is the last to recede, and it generally happens that enough has been done in the way of treatment, long before the skin resumes its natural complexion. If you were to continue the administration of mercury until the natural colour returned, you would very often push it to a useless and even dangerous extent. In such cases a faded brownish or dirty tinge remains long after the re-establishment of healthy action.

There is a case in the female fever ward which requires a passing observation. A young woman, previously in the enjoyment of good health, was seized with symptoms of fever after exposure to cold; she got rigors followed by headach, hot skin, thirst, nausea, and acceleration of pulse. It is unnecessary for me to detail the symptoms which attended her illness during the past week; I shall content myself with pointing out the symptoms which particularly attracted my attention to her case on Saturday morning. At that time her fever had increased, she complained of severe headach and restlessness, had foul tongue, thirst, and symptoms of gastro-intestinal irritation. Such matters, however, demand no very particular consideration; what chiefly fixed my attention was the occurrence of slight and transient rigors during my examination; I observed her shuddering three or four times in the space of a few minutes. On questioning her respecting these brief rigors, she informed me that they had occurred with more or less frequency for the last three days. Now, gentlemen, whenever you meet with a symptom of this description in fever, be on your guard; watch the case with anxious, unremitting attention, and never omit making a careful examination. It is in this way that one of the worst complications of fever, treacherous and fatal disease of the brain, very often commences. On ex-

mining this girl, we found that she had not only headach, but also acute pain referred to the left ear, the external meatus of which was observed to be hot and tender to the touch. In addition to this, we were informed by the nurse, that she had been seized with a sudden fit of vomiting shortly after we left the ward on the day before. Here was an array of threatening symptoms calculated to awaken attention in any, even the most heedless observer. A patient after exposure to cold is attacked with symptoms of fever, she has headach and restlessness, she then begins to complain of acute pain in the ear, darting inwardly towards the brain, and, finally, is seized with sudden vomiting. Under these circumstances, it is not difficult to form a diagnosis, and there can be little doubt but that the phenomena here present were indicative of incipient inflammation of the membranes of the brain. It is not easy to say whether in such cases the inflammatory affection of the membranes precedes the external otitis, or whether the inflammation commences in the external ear and spreads inwards, though I am inclined to adopt the latter supposition, and the circumstance of the fever and earach arising from cold seems to give an additional degree of probability to this view of the question. Be this as it may, there could be no doubt but that this girl was on Saturday labouring under incipient inflammation of the membranes of the brain, as denoted by headach, rigors, acute pain in the ear, and vomiting.

Here let me observe, gentlemen, that, in cases of this description, I look on the occurrence of external tenderness, not merely as an indication of internal disease, but also as a favourable symptom. I have remarked that in all cases where this happens, the physician becomes more speedily and seasonably aware of the existence of internal disease, and the remedial means employed act with a more decidedly beneficial effect. I would prefer having to deal with an inflammatory affection of the brain or bowels, accompanied by external tenderness, and would feel much more certain as to the result, than if this symptom were but faintly marked, or totally absent. This observation is founded on experience.

In treating this case, you have seen that I ordered relays of leeches to be applied in the vicinity of the affected ear until the earach ceased. I have long followed this practice of applying a number of leeches in succession for the relief of local inflammation, and I can state with confidence that the result has been, in the majority of cases, highly satisfactory. Some prefer the application of a great many leeches at once, but my experience speaks strongly in favour of the practice of applying a small number, repeated at short intervals, until the violence of the local inflammation is subdued. Relays of six or eight leeches will suffice in the majority of cases of pectoral, cerebral, or abdominal inflammation. In some, however, when the attack is violent, fifteen or twenty

must be applied at once; each succeeding relay may consist of a smaller number than that which preceded it. In this manner I have maintained a constant oozing of blood from the integuments over an inflamed organ for twenty-four, or even thirty-six hours. In addition to this, I determined to bring her system rapidly under the influence of mercury, and, with this intent, administered calomel to the amount of a scruple in the twenty-four hours. These means have acted favourably, and she feels much better to-day. (This patient perfectly recovered.)

Allow me to make one observation more which this case suggests. This young woman, you recollect, had, on her admission, some epigastric tenderness, which we removed by leeching, and she remained free from any symptoms of gastric irritation until last Saturday, when she got a sudden attack of vomiting. Now, *in all feverish complaints, where, during the course of the disease, the stomach becomes irritable without any obvious cause, and where vomiting occurs without any epigastric tenderness*, you may suspect congestion or incipient inflammation of the brain or its membranes. If called to a case of scarlatina, where there is severe vomiting, and perhaps diarrhoea, unaccompanied by thirst or epigastric tenderness, what should your practice be? Are you to direct your attention to the alimentary canal, and endeavour to arrest these symptoms?—No. The vomiting here depends on active congestion of the head, and such cases are very apt to end in coma, convulsions, or death, from disease of the brain. You are all aware, that in cases of injuries of the head, followed by congestion of the brain, vomiting is one of the most prominent symptoms. The same thing occurs in febrile affections attended with determination to the head. You are not to conclude that a fever is gastric because it commences with nausea and vomiting; this is a serious, and very often a fatal, mistake; yet I am sorry to say it has been committed by many practitioners, and I have been guilty of it myself. In such cases you should not waste time in attempting to relieve gastric irritation by cold drinks, and leeches to the epigastrium, or to check diarrhoea by chalk mixture and opiates; you should direct your attention at once to the seat and origin of the mischief, and employ prompt and effectual means to relieve the cerebral congestion. Where the disease sets in with severe vomiting, unaccompanied by distinct evidences of gastric inflammation, whether it be common fever, or scarlatina, or measles, or small-pox, I commence the treatment by applying leeches to the head, convinced that in this way I shall be most likely to prevent an approaching dangerous congestion of the brain. I am anxious to impress this observation on your minds, because I am fully sensible of its importance, and feel certain that you will derive much advantage from bearing it in recollection during the course of your future practice.

The next affection to which I shall draw your attention is chronic rheumatism, of which we have a well-marked instance in the man who lies in the chronic ward immediately under the window. He complains of pain, weakness, and numbness of the lower extremities, for which he used the decoction of sarsaparilla and minute doses of corrosive sublimate for a fortnight, without any obvious improvement in his symptoms. His complaint is of considerable duration, it being now fifteen weeks since he was first attacked. This I need not tell you is a very unpromising feature in his case. When rheumatism has continued for three or four months it becomes a very intractable disease; indeed, there is scarcely any affection which tasks the ingenuity, and tries the patience, of a medical man more than chronic rheumatism. In this case, however, we have been so fortunate as to hit on a remedy suited to the complaint; the man has been rapidly improving within the last fortnight, and is now nearly well. You will recollect, that when I undertook the treatment of this case the patient was free from fever, his general health but little impaired, his pulse tranquil, his appetite good, no remarkable tenderness or redness of the joints—in fact, nothing to indicate the existence of acute local inflammation; consequently, it would have been useless to have recourse to leeches or bloodletting, or to administer antimonials, nitre, or colchicum. In such cases as this a different line of practice must be followed; you must have recourse to stimulant diaphoretics, remedies which will increase the secretion from the skin, at the same time that they exercise a stimulating action on the nervous and capillary systems. Accordingly we prescribed for this man the following electuary, of which he was to take a teaspoonful three times a-day:—Powdered bark ℥j, powdered guaiacum ℥j, cream of tartar ℥j, flower of sulphur ℥ss, powdered ginger ℥j, to be made into an electuary with the common syrup used in hospitals. The guaiacum not only acts on the nerves, tending to remove chronic pains, but also acts on the skin: you will find these and other properties possessed by it detailed at large in your works on *Materia Medica*. Whether given in the form of powder or tincture it often proves an extremely useful remedy in cases of chronic rheumatism, where no symptoms of active local inflammation or general fever exist; where either of these are present it is inadmissible. Ginger has also a stimulant effect, although its action is much more limited. It is a favourite domestic remedy, and is very frequently prescribed by our rival candidates for therapeutic celebrity—old ladies—in cases of chronic, or, as they term it, cold rheumatism; and I must confess that I have seen some benefit derived from their specific—ginger tea. With these we combined sulphur, which exerts a peculiar stimulant operation on the skin and alimentary canal. Sulphur is an extremely active remedy, and singularly pene-

trating in its nature, finding its way into many of the secretions, and most of the tissues of the body. You will find it in the urine in the form of sulphates, and it is exhaled from the skin and mucous membrane of the bowels in the form of sulphuretted hydrogen. Having said so much respecting sulphur, you will perhaps inquire why I prescribed the bark? It is not easy to give a satisfactory explanation of this; but we know from experience, that in cases of rheumatism, after fever and local inflammation are removed, bark and other tonics have been found extremely valuable. The cream of tartar is given with the view of tempering the other stimulant remedies, it being known to possess cooling and aperient properties. The whole form a combination which is similar in its composition to a well-known popular remedy for rheumatism—the Chelsea Pensioner.

Having thus explained the general tendency of these medicines, and mentioned that they are to be made up into an electuary, it only remains to speak of the effect produced, and the dose or quantity to be given. I have stated that the ordinary dose is a teaspoonful three times a-day; this, however, will be too much for some, and too little for others. The object in every case should be to keep up a mild but steady action on the bowels, and to procure a full alvine discharge at least once a day. If the dose mentioned already does not answer this purpose, it must be increased; if the bowels are too free, it must be diminished. You should never omit making regular inquiries after the state of the bowels while the patient is using this electuary, for if these matters are neglected, the patient will not obtain the full benefit to be derived from it. Besides opening the bowels, this electuary acts on the skin, and frequently causes a rapid disappearance of the disease. I need not say that in addition to this I ordered warm-baths; they coincide in effect with the electuary, acting on the skin, and tending to relieve the rheumatic pains.

There is another very remarkable case bearing some affinity to the preceding, on which it may be necessary to offer a few remarks; I allude to the patient with sweating arthritis, to whom I drew your attention this morning. This poor man, who is somewhat advanced in life, has been labouring for several months under inflammation of the joints of a rheumatic character, manifesting itself by pain, stiffness, swelling, and probably some slight effusion into the synovial membranes. These symptoms were accompanied by profuse and constant perspirations, with a tendency to diarrhoea, circumstances which caused a manifest deterioration of his health and strength; he became pale, cachectic, and emaciated. His case had been very tedious and intractable; he had been a long time in the hospital, and had used all the most appropriate remedies, but without any appreciable improvement; his joints remained stiff, painful, and

almost useless, he was greatly reduced in strength, and entirely confined to his bed. In addition to this his pulse continued unreduced in frequency, and this is always a bad sign; cases of rheumatic arthritis, attended by prolonged excitement of the circulation and copious sweating, are generally found to exhibit an intractable chronicity, and too often terminate in rendering the unfortunate patient a cripple for life.

Now in this case many remedies had been tried without effect, and the state of the man's constitution, combined with the circumstance of his having a tendency to bowel complaint, contributed to reduce still further the scanty list of our remedial agents. Alterative remedies to affect the general system were almost entirely out of the question, and a vast number of local applications had proved unsuccessful. It occurred to me here that some benefit might be derived from mercurial ointment gently rubbed over the affected parts, assisting its action by the use of rollers applied round the joints. Fortunately the experiment proved successful; in the course of a week or ten days the swelling diminished considerably, the pain is nearly gone, and the power of motion is returning. His mouth has become affected, but the relief experienced appears to be proportioned, not to the influence of mercury on the general system, but to its effect on each individual joint. As a proof of this, I may state that the man has been mercurialised before but without any favourable result.

Here, gentlemen, is an important point for consideration. A patient labours under a certain number of local inflammations, for which mercury is given internally so as to affect the mouth, but without any manifest improvement of symptoms; we afterwards try the same remedy in another form, we apply it locally, in the shape of ointment rubbed into the skin over the diseased parts, and we succeed in giving relief. This is a fact deserving of attention. You will perhaps ask me to explain this,—I cannot do it; but I can bring forward many other analogous examples. If you refer to Mr. McDowell's valuable paper on erysipelas, published in a late number of the *Dublin Medical and Chemical Journal*, you will find that many cases of this affection derived great benefit from the use of mercurial ointment, in fact, much more than they could by giving mercury internally. In the next place, I have met with many cases of enteritis and peritonitis where the disease continued after the system became affected by mercury, and I have observed that these cases yielded rapidly to blistering the abdomen and dressing the raw surfaces with mercurial ointment. Dr. Marsh and I attended a young gentleman lately, who had low fever, accompanied by a quick but feeble pulse, and great restlessness. About the tenth day, his belly became tender and exquisitely painful; he had thirst, diarrhoea, and other symptoms of enteric and peritoneal inflammation. Before

his illness he had been of rather delicate habit, and had further impaired his health by close study. He was therefore unfit for depletion, and of this we were convinced by the debility which followed the application of a few leeches. Under these circumstances we ordered a large blister to be applied to the abdomen, and the vesicated surface to be dressed with mercurial ointment. This proved eminently successful; the peritonitis, enteric irritation, and fever, soon disappeared, and the young gentleman recovered completely. The same thing is seen in many cases of pleuritis; the constitutional effect of mercury will fail in removing the affection of the pleura until it is applied locally. I might also refer to instances of common inflammation of the testicle, in which mercurial ointment smeared over the part has been found decidedly beneficial. It is unnecessary for me, however, to multiply examples, what I have stated give ample proof of the utility of mercury applied locally. When I was a student, it was the fashion to scout the doctrine that any distinct effect could be produced by the local application of mercury; our teachers laid it down as an axiom, that, to produce any sensible effect, it was necessary that it should first enter the system through the lymphatics. Thus, when you rub mercurial ointment over the liver to remove hepatic derangement, they said, before it could exert any influence on the liver, it had to pass along the thoracic duct, become mixed with the circulation, and manifest its peculiar action on the whole economy. Hence, in a case of hepatitis or testitis, it was deemed useless to apply mercurial ointment over the liver or testicle, since it had, as they expressed it, to go its rounds through the whole system, before it could affect either of these organs. This reasoning has an appearance of plausibility, but it is contradicted by facts. Numerous examples might be cited to prove that the greatest advantage may be derived from the local application of mercury, independent of any effect produced by it on the general system. How often do we see an incipient bubo dispersed by mercurial frictions, before any constitutional effect occurs? How frequently do we see laryngeal and hepatic inflammation relieved by the use of mercurial ointment without salivation? Do the beneficial effects, which we so often observe from the emplastrum ammoniaci cum hydrargyro, depend necessarily upon the mouth being affected? Is the relief which follows the use of mercurial ointment in erysipelas or testitis unattainable unless preceded by mercurial action in the whole system? Indeed, any person who reviews this subject dispassionately will see that the doctrine of a preliminary constitutional affection being absolutely necessary, in order to obtain the specific action of mercury on any particular organ, is wholly untenable; while, on the other hand, there is a host of evidence to prove that,

locally applied, it produces a primary and distinct effect, totally independent of its action on the general economy.

The last case to which I shall direct your attention is one of syphilitic iritis. A young man has been admitted this morning, presenting symptoms of secondary syphilis in a well marked form, but simple and uncomplicated by any previous treatment. He took no medicine for the primary or secondary symptoms, except two pills, which he got at a dispensary about two months ago, and which were not followed by any sensible effect. The secondary symptoms came on with pains and feverishness, and are at present extensively diffused over his body in the form of elevated blotches, of a character intermediate between the papular and squamous. About four or five days back he was advised to take a warm bath for his pains, but having to walk a considerable distance afterwards, the day also happening to be chilly and sharp, he got cold in returning home, and soon after experienced pain in the left eye, with lachrymation, and diminution of the power of vision. Had he been exposed in the same way while in health, he would probably get slight conjunctivitis, or sore throat, or bronchitis; but the case was altogether different with a man labouring under a constitutional affection, having a tendency to manifest itself in almost every tissue of the body, and prepared to modify every form of inflammation to which accident might give rise. Again, if the man's constitution was in a sound state, his feverish cold, or conjunctivitis, or sore-throat, could be removed by very simple means, such as bathing the feet, taking a little warm whey on going to bed, and some opening medicine the next morning. But here the state of the constitution occasions the substitution of syphilitic iritis for simple conjunctival inflammation, and demands a peculiar plan of treatment. You are all aware that persons who have taken mercury for syphilis, without being entirely cured, are very liable to get iritis on slight exposures. Some persons attribute this entirely to the mercury, but mercury in such cases merely acts by rendering the patient more liable to cold, so that when iritis occurs in a patient who has been under a mercurial course, it is not in consequence of the direct operation of mercury, but by its increasing his liability to be affected by impressions from cold. For the same reason the circumstance of his having taken mercury before is not, as some persons maintain, any argument against his using it a second time.

On examining this man, we found that he had some pain referred to the eyebrow, the eye also is more vascular than natural, and presents that appearance which is so characteristic of iritis; there is some alteration in the colour of the iris along its free margin, but no irregularity of pupil. Along with these symptoms, there is dimness of vision, and objects appear as if seen through a veil.

This arises not from any opacity of the cornea, or opalescence of the aqueous or vitreous humours, but from inflammation affecting the iris, ciliary zone, and, probably, the coats of the retina. In such cases, where the inflammation spreads from the iris to the ciliary zone, it would appear that the ciliary nerves and retina partake in the mischief, for vision becomes affected before we can discover any appearance of derangement in the optical instrument. The peculiar appearance of the eye in this man, the change of colour in the free margin of the iris, and the diminution of the power of vision co-existing with an eruption of the skin, point out the nature of the disease, and shew that the affection of the eye, though proceeding from a common cold, has been modified by the syphilitic taint in the constitution.

We next come to consider the plan of treatment to be pursued. In order to prepare his system for mercury, I have ordered him to be blooded, purged, and put on the use of antimonials for two or three days. Venesection, purging, and tartic emetic, may be of some use in relieving or arresting the symptoms of iritis, but I do not place any great reliance on them for removing the disease; I merely employ them as auxiliaries, depending on mercury for the cure. Here it may be necessary to observe, that there is considerable variety in cases of iritis. Some are extremely mild; there is no palpable sign of acute inflammation present, and the chief symptom is diminution of the power of vision. Such attacks are sometimes not perceived by the patient until some accident informs him that the sight of one eye is nearly gone. In other cases, after reaching a certain point, it begins to decline, and frequently terminates spontaneously. Others present symptoms of a more decided character, but still are free from danger. Every attack; however, where the inflammation is at all of an intense character, will go on to destroy vision, unless met by prompt and efficacious treatment. In this man's case the symptoms are not very acute, and hence there is no necessity for having recourse to mercury at once; the disease might certainly terminate in disorganisation of the eye, but it would be some weeks before this would be accomplished. On the other hand, there are cases which, if neglected, would destroy vision irremediably in the space of three or four days. Such cases require extremely prompt and energetic measures. But where iritis is not of a violent kind, you need not depart from the plan of treatment you would have laid down for the cure of syphilitic affections where no iritis existed. Here you bleed, purge, give antimonials and mercury, and you find that the syphilitic eruption and iritis disappear together. But where the symptoms of iritis are so severe as to threaten rapid disorganisation of the eye, you disregard the syphilitic affection, and direct your entire attention to the preservation of the eye. Here you bleed, leech, apply belladonna

to the eye, and give calomel in doses of ten grains or a scruple every third or fourth hour, so as to bring the system as rapidly as possible under the influence of mercury.

With respect to belladonna, I believe you are all aware of its value in iritis. Some think that its action is merely mechanical, that it dilates the pupil and no more; but I am firmly convinced that its influence is not limited to mere dilatation of the pupil. I believe that it acts on the vitality of the eye, and that when employed externally or internally it possesses the properties of diminishing the irritability of that organ, and thus tends indirectly to remove local inflammation. In scrofulous ophthalmia, where the eye is exquisitely sensible, where the slightest exposure to light causes intense pain and copious lachrymation, one of the best remedies I am acquainted with is belladonna given internally. Thus, you perceive that belladonna has not only a mechanical action, producing dilatation of the pupil, and tending to prevent adhesions, but also, by its influence on the retina and ciliary nerves, diminishes the irritability of the eye, and aids materially in effecting the removal of local inflammation.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXVI.

Turning—Cæsarean Operation and Section of the Symphysis Pubis.

GENTLEMEN,—You will recollect, that at my last lecture I endeavoured to impress upon your minds how important it is to preserve the membranes unruptured until the hand is altogether within the uterus, and the arm so completely occupying the vagina, as to prevent the liquor amnii escaping. To find the feet of the child we should pass our hand along the anterior surface of its body, as the feet are generally crossed upon the abdomen. If, however, we are not certain of the child's position, we must bear in mind the excellent rule of Dr. Denman, namely, that the hand "must be conducted into the uterus on that side of the pelvis where it can be done with most convenience, because that will lead most easily to the feet of the child;" but in arm presentations we can generally form a pretty tolerable guess how the child is situated, for unless the arm or body be unnaturally twisted, the palm of the presenting hand is always turned towards the inferior extremities or fore parts of the child. In pushing your hand upwards, never let the pressure be on the uterus, but upon the child, except, if possible,

upon its abdomen, for the uterus may be easily inflamed or even ruptured, while, if the child does bring a black spot with it, it is of little consequence, comparatively speaking; the parts of the child yield, whereas the uterus does not, and this fact is of considerable importance as to how you hold your hand at the moment a pain comes on. The child can scarcely receive injury from pressure of the hand, except upon the abdomen, and here it appears to cause death in a similar manner to what pressure upon the cord does, and should therefore be avoided.

If we feel the knees, they will easily conduct us to the feet, or they may be pulled down until the feet come within our reach; if we can only get hold of one foot we should bring it down; but it is better to bring down both if possible. Boer, of Vienna, who was so great an advocate for leaving things as much as possible to nature, and for the greatest possible simplicity, was of this opinion. Mad. la Chapelle and Professor Naegele confirm it, and these are the three most experienced names in Europe. In no lying-in hospital in England, Germany, or France, has turning been so successful as in the hands of Madame la Chapelle. One reason in favour of our bringing down both feet is, that where we have brought down only one, the other is liable to stick across the pelvis, and thus become fixed. La Motte relates a case where the child presented with the head, hands, and foot; this last he brought down as far as the knee, but here it became immovable, "although," says he, "I did all I could." He passed his hand up again, and found the other leg fixed against the middle of the left ilium, and, as it were, jammed into the very substance of the uterus; this he disengaged, and, bringing down both feet, the labour terminated easily. This, however, is rare; and Portal recommends, if you cannot bring down both feet, to bring down the foot and leg you have taken hold of first, which, as it comes forwards, the arm which presented recedes, the other foot lying close to the child's belly. It has been supposed by some, that having one leg of the child turned upon its abdomen tended to preserve the cord, and, as far as rendering the passage of the child's body more difficult and gradual, it resembles rather a presentation of the nates, which, as I have before told you, is more favourable to the life of a child than a presentation of the feet. Giffard also mentions, that where the child is not very large and the patient has had children before, there is not a necessity for pulling down both feet, for if one leg presents and the other be bent upon the abdomen, it will easily pass. All this is, doubtless, perfectly true, gentlemen; but still I must declare myself in favour of bringing down both feet, for it has always appeared to me, that the nates of the child did not enter the brim of the pelvis so readily where I had hold of one foot as where I held both; and we may easily imagine this to be the case,

when we recollect, that under these circumstances the child would be pulled unequally.

Where the knees are high and the feet out of reach, it is of the utmost importance that you should distinguish correctly between the knees and the elbows of a child, for, by a superficial observer, they may be very easily mistaken, and this must by all means be avoided. It will be well worth your while, gentlemen, to examine the difference upon a living infant;—if you bend its knee and then feel the joint, you will find that it consists of two prominences (the condyles of the femur) and a depression between them; whereas in the elbow you have the sharp prominence of the olecranon in the middle. This means of diagnosis has served me in several cases of difficult turning, and I am sure you will find it very useful: the size of the arm or thigh is no criterion whatever.

The feet must be held between the fore, middle, and ring fingers, and in bringing them down it must be with the articulation, or, in other words, the child must be turned forwards. As the child turns, the hand upon the outside the abdomen is of great assistance, it assists us to move the body, and, at the same time, prevents the head from flying too suddenly towards the fundus uteri. This is of great importance, for the too sudden movement of its contents will frequently have such an effect upon the uterus as to produce a paralytic or atonic state of this organ, which will sometimes be followed by sudden death. As soon as the head is in the fundus uteri it has become a common foot presentation, and, as such, we ought to treat it, leaving the rest entirely to nature. This, as I before mentioned, Deleurye noticed so particularly, and for this reason I must request you, gentlemen, carefully to bear in mind the distinction which I have drawn between turning the child and bringing it into the world. "In making the turning," says Wigand, "I make a point of doing nothing after I have brought a foot into the vagina, but waiting patiently for the pains I leave the rest to nature; in this way I have observed that when the pains begin to expel the child, they do it with greater power and rapidity than in the most regular labours." In another place, after having brought the feet into the vagina, he says, "I then turn the patient unto her left side and wait for the pains, these sometimes do not return for a whole hour, but then so powerfully and quickly that the child is born in full vigour and activity." Dr. Merriman, in his Synopsis of Difficult Parturition, mentions, that it has been recommended by Dr. W. Hunter to bring the child down by the nates instead of by the feet, from the known fact that nates' presentations are more favourable to the child's life than those of the feet. The authority of such a man deserves much attention, and certainly where it can be done it is desirable. W. J. Schmitt, of Vienna, has also recommended it, but it is evident, where the membranes have been

ruptured some time, and the uterus firmly contracted upon the child, that taking hold of the feet must be much easier, more especially if the child be covered with the vernix caseosa. The grand principle is the same, viz. to conduct the expulsion as gradually as possible; there is no use whatever in hurrying this part of the operation, for if the child be alive we place it in imminent danger of its life, and if it be dead, as will easily be known by the cord not pulsating, we are putting the mother to a great deal of suffering for no reason. "In footing cases (says Dr. Merriman) where compression of the cord by the head is dreaded, the delivery of the body should be very slow, to relax and dilate the part as much as possible." The toes should be always turned backwards, and as the chin comes within reach it must be depressed upon the breast, by placing the first and second finger of the left hand upon each malar bone, and pushing up the occiput with the fingers of the right hand, in this manner the chin passes more quickly over the perinæum, and the cord falls naturally into the hollow of the sacrum, where it is safe; in fact, we should always endeavour to direct the cord towards one of the sacro-iliac synchondroses, more especially the right, because here there is most room when the head is passing; on the other hand, where the chin is over the pubes, or where it, in any other direction, has quitted the breast, the cord is certainly pressed upon, and the child lost.

Turning by bringing down the feet was unknown to the ancients, they considered that the child could only be born with the head first, and therefore tried always to bring down the head; if this did not succeed they had recourse to sharp hooks, and thus brought away the child. It was, I believe, Ætius, a physician of Amida in Mesopotamia, about the beginning of the sixth century, who recommended, if the feet presented, not to push them up and search for the head, but to deliver the child in that position; the operation was first proposed and taught by Pierre Franco in 1561, but it was not brought into notice, or practised, until 1573, by the celebrated French surgeon, Ambrose Paré; his work was afterwards translated into Latin by his pupil, Guillemeau, in 1582, and thus made more known. To Mauriceau, a man of great learning and experience, are we indebted for the operation being brought to a greater degree of perfection, and being better understood, by means of his valuable work, which appeared in 1668, also to De la Motte, a man of remarkable veracity. Mauriceau described chiefly his successful cases, but La Motte candidly mentions also those where he failed, and this is what renders his observations so valuable; hence Haller calls him *homo sincerissimus*, it was he who greatly improved the method of turning, by never trying to push back the presenting part, but passed up his hand along it, knowing that it would recede as he brought down the feet; from the result of his practice the elder Stein

must have turned with great dexterity, also Osiander, and especially, as I have before mentioned to you, Madame La Chapelle.

The next operation, which I have to describe to you for delivering a full grown living fetus, is the *Cæsarean operation*, where, on account of circumstances, which render delivery by the natural passages impossible, the child is brought into the world through an incision made into the abdomen and uterus. When the misproportion between the size of the child and cavity of the pelvis exceeds the degree within which the delivery cannot be effected by the means already treated of, the only means that remains is either by delivering the child through an artificial passage, or by lessening its size by cutting instruments. The *Cæsarean operation*, gentlemen, is the most dangerous operation which exists. Richter, in his Principles of Surgery, says, "in spite of the greatest possible precautions, the result, in by far the greatest number of cases, is unfavourable." Metzger, in his *Medicina Forensis*, says that in fifty cases only one survives, but this is making it appear worse than it really is; still, however, it is a highly dangerous operation. According to Boer, out of fourteen cases only one survives, and Baudelocque says, that out of ten scarcely one recovers; hence we are not authorised to perform it upon a living person, unless it be most distinctly and imperiously indicated, the only case where it is so is where one or other of the pelvic diameters is so contracted as to render it impossible for a full grown fetus to be brought alive into the world by the natural passage; in this case it is the only means of preserving the life both of the mother and the child, but then we must not only feel certain that the child is alive, but that it is also capable of supporting life, before we can conscientiously undertake the operation. This uncertainty as to the life or death of the child greatly increases the difficulty of deciding. Under circumstances, where there is reason to believe that although the child may be alive, it is nevertheless unable to prolong its existence for any time, and the pelvis so narrow that it can only be brought through the natural passage piecemeal, we are certainly not authorised in putting an adult and otherwise healthy mother into such imminent danger of her life, for the sake of a child which is too weak to support existence. Circumstances may nevertheless occur where the pelvis is so narrow, that the child cannot be brought through the natural passage, even piecemeal; in this case, even if the child be dead, the operation becomes unavoidable. Under the above mentioned circumstances (says Richter) it is the duty of the surgeon to perform the operation, and he can do it with the more confidence, from the knowledge of many cases being on record where the operation has succeeded even under very unfavourable circumstances, and where it has been performed very awkwardly; moreover it seems highly probable, that the unfavourable

results of this operation cannot often be attributed to the operation itself but to other circumstances; not unfrequently the uterus has been so bruised, irritated, and injured by the violent and repeated attempts to deliver by turning, or the forceps, and the woman so exhausted and brought into such a spasmodic and feverish state, by the fruitless pains and vehement efforts, together with the anxiety and restlessness which must occur under such circumstances, that it is impossible for the operation to prove successful. Here it is an important rule, that we should decide as soon as possible, as to whether she can be delivered by the natural passages or not, we should allow of no useless and forcible attempts to deliver her, and if these have been made we should carefully examine whether the passages, &c. have been injured, and should proceed to the operation without delay. As I have before told you, gentlemen, it is almost impossible to know with certainty, *before labour*, whether the child be alive or dead; hence, in England, where this operation has been so remarkably unsuccessful, the perforation has been almost always preferred, in fact the *Cæsarean operation* in this country is only indicated where it is impossible *any how* to bring the child away by the natural passages. Dr. Merriman, in his *Synopsis of Difficult Parturition*, has given some interesting details of the result of the various *Cæsarean operations* which have been performed in England during the last twenty years. Of twenty-three cases only two women were saved and eight children, thus out of forty-six lives only ten were saved; although it is no systematic work I consider it as one of the valuable books which have been lately published on the subject.

"On the continent of Europe," says Dr. Dewees, "this operation is resorted to at an early period of labour, before the woman is either exhausted by the continuance of bootless pains, or in a state of almost gangrene from fever; the uterus is cut before it is inflamed, and the child is extracted before it has expired, and the attempt to save both mother and child is sometimes crowned with the happiest result. Is there not, then, strong reason to believe, that were the same independence exercised by the surgeons of Great Britain toward the poor sufferers from deformity, the same fortunate issue would happen as in France or Germany, and as frequently? procrastination is the cause of the evil."

With respect to the directions for performing the operation, these I shall leave for you, gentlemen, to procure from the different works on surgery. It would be of little use my taking up your time by entering upon this subject where I have no observations of my own to offer, and where you can procure all the necessary knowledge much more fully from other sources. The article on the *Cæsarean Operation* in Cooper's *Surgical Dictionary* is well worthy of your attention, for it gives an excellent digest of every thing which is known about it.

The incision has been recommended by various authors to be made in three different ways,—in the linea alba, at the side, viz. at the outer edge of the rectus abdominis muscle, and transversely. The incision in the linea alba is that which has been most commonly used, and the preference in favour of this is supported by the authority of Smellie, Platner, Henkel, Deleurye, Baudelocque, and others. It is recommended by the following reasons:—1st, the abdomen is usually more distended at this point; 2nd, the uterus lies immediately beneath the integuments; 3rd, the intestines are usually pressed towards each side, and therefore when the incision is made on one side they frequently protrude, a circumstance which seldom occurs when it is made in the linea alba, except, perhaps, towards the end of the operation; 4th, in the linea alba we have only to cut through the external integuments in order to reach the uterus, while at the side we have to cut through considerable layers of muscle; 5th, the cicatrix in the linea alba is generally firm and strong, probably from the tendinous nature of the incised parts, hence protrusion and hernia of the intestines occur much less frequently with this than with the cicatrix of an incision made to one side*. The incision to one side has been recommended by Levret, &c., for the purpose of not cutting into the uterus at the spot where the placenta is situated; but it is extremely difficult to ascertain to which side the placenta is fixed, nor are the rules which M. Levret has given for determining this point at all satisfactory. The transverse incision was recommended by M. Lauerjat, of Paris, in 1788, on the grounds that where the patient lies in a bent posture, the transverse incision is more easily closed, and does not need the bloody suture, hence it heals more rapidly; it is considered also to be less liable to be torn open by coughing or vomiting than where the other incisions are made. But the advantages which M. Lauerjat has assigned to this method do not outweigh the disadvantages, and hence it has been scarcely ever practised.

Another mode of operating has been proposed by Professor Ritgen, of Giessen, viz. of making a transverse incision at that point where the peritoneum quits the anterior parietes of the abdomen, and, passing over the fundus of the bladder, is continued upon the anterior wall of the uterus. He proposes to separate the peritoneum as little as possible, and make the incision in that part of the anterior surface of the uterus which is not covered by it; hence we should thus avoid cutting into the cavity of the peritoneum, and exposing the intestines to the action of the external air. All this may be very good in theory, gentlemen, but I need hardly tell you that it will not do in practice. It is of the utmost consequence that the intestines should be exposed to the air for as short a time as

possible; it is well known that they rapidly increase in bulk, partly from inflation and partly from thickening of their parietes, and this greatly diminishes the chances of recovery. "Are not the fatal consequences," says Dr. Hamilton, "rather to be imputed to the access of the air on the irritable viscera? Dr. Monro, of Edinburgh, in making experiments on young small animals, such as bitches, cats, frogs, &c., by opening the cavity of the abdomen, and tying the biliary ducts, remarks, that though a large opening into the abdomen be made by incision, if the wound be quickly closed and stitched, the animal will recover, and no bad consequences follow, but if exposed a few minutes to the air, dreadful pain soon comes on, which the creature expresses by the severest agonies, convulsions at last ensue, and death within four or six hours after the operation. On opening the abdomen after death, the whole viscera are found to be in an inflamed state and universally adhering to one another." Professor Naegele suggests that large sponges dipped in oil should be laid over those convolutions which are exposed to the air during the operation. The condition of the system at this time is peculiarly unfavourable to recovery after such an operation, on account of the discharge of lochia, the secretion of milk, and the disposition to inflammation and exudation which now exists.

I shall not detain you by giving the old and oft repeated case of Jacob Nufer, the pig-gelder of Siegershansen, who first performed this operation on a living woman (and that too with success) in the person of his own wife, A.D. 1500, for you will find a *quantum suff.* of the particulars in almost every systematic work on midwifery, besides a variety of much more interesting and instructive cases among the different medical periodicals. Although the Cæsarean operation has been performed with much greater success on the Continent than in this country, nevertheless the result has been unfavourable in the hands of all the celebrated accoucheurs. Thus, for instance, Stein performed it three times, Baudelocque four times, and Oslander twice, and all terminated fatally. It is usually said that the Cæsarean operation derived its name from Julius Cæsar, who is supposed to have been born in this manner, but it is highly improbable that this was the case, because at the age of 30 Julius Cæsar speaks of his mother as then living. Professor Naegele would rather explain it thus, viz. that some one of the Julian family, which was one of the noblest in Rome, having been born *ex caso matris utero*, had acquired the surname from the operation, not that the operation had taken its name from the family name of Cæsar. The operation itself is of great antiquity, for as early as the time of Numa Pompilius no woman far advanced in pregnancy was allowed to be buried until she had been opened.

Section of the Symphysis Pubis.—I shall conclude this lecture, gentlemen, by giving you a short sketch of the history of an opera-

* Richter.

tion which was once supposed capable of superseding the necessity of the Cæsarean section, and which for a time produced a considerable sensation in the medical world, but which has since fallen into merited disrepute. It had long been a prevailing opinion among many authors, that in difficult labours the bones of the pubes separated from each other, and thus enlarging the pelvic cavity allowed the head to pass. This doctrine had been taught at a very early period by Severin Pineau, viz. in 1639, and also by Petit in his surgical lectures; but it has been since satisfactorily shown, that the antero-posterior diameter, which is that most usually defective in a deformed pelvis, gains nothing by a separation of the pubic bones; this has been shown by Boer and many others. The unfavourable results, and highly dangerous character of the Cæsarean operation, had always excited much attention, and had induced De la Courouee, so early as 1655, to attempt the operation on a poor woman who had died in labour undelivered; but although the result appeared favourable, still it did not seem to excite any further attention until 1768, when Sigault, at that time student of medicine, first proposed this operation to the Academy of Surgery at Paris, as a means of preventing the Cæsarean operation being performed upon a living woman. There can be little doubt but that he got the idea from Pineau's work, or, as Michell asserts, was informed of it by one who had been formerly a pupil of Petit. Dr. Ruffel, who was appointed to examine into the merits of his proposition, gave an unfavourable report, for having made several experiments on dead bodies, he found that the increase of space in the pelvis was so trifling, that no advantage could be expected to be gained in a labour where the narrowness of the pelvis was so great as to indicate the Cæsarean operation. On these grounds the Academy rejected his proposition. Anton Louis, Secretary to the Academy, wrote an account of it to the celebrated Peter Camper, who was pleased with the idea, and repeated the experiments on dead bodies, and on some living pigs, but these animals would not bear the bandage, and although the wounds healed, they remained lame. The notice which Camper had paid the subject encouraged Sigault, although Baudelocque confirmed Ruffel's opinion in 1776.

At length an opportunity presented itself in the case of a deformed woman, the wife of a soldier, named Souchot, at Paris, who had been delivered four times before by Sigault on account of deformed pelvis, where the antero-posterior diameter was said by some to be three, by others to be only two, inches and a half in length, and where the last time he had turned and brought away a dead child in the presence, and with the assistance, of Levret, Dessault, Vicq d'Azir, Coutouly, and others, and where Levret is said to have declared it as his opinion that the pelvis was only two inches and a half from the promontorium sacri to the symphysis pubis, and

that it was impossible to deliver her of a living child without performing the Cæsarean operation. On the 1st of October, 1777, towards evening, Sigault determined on performing the operation of dividing the symphysis; he had no other witness but a physician named Alphonse le Roy, a sworn enemy to Levret, a man who, with the exception of Sigault himself, was most prejudiced in favour of the operation, and one the veracity of whose testimony had long been doubtful to every impartial mind; it seems strange, therefore, that Sigault, who for the last five days before the operation had been well aware that he would have to deliver the patient Souchot, should not have made a point of having more impartial witnesses present. By Sigault's own account he performed the operation in a state of great trepidation, and finished it with a degree of unnecessary and injurious rapidity in five minutes, by the light of a single candle, and without any extraordinary suffering on the part of the patient, although she herself declared that she had suffered most acute pain. The ossa pubis are said to have yielded two inches and a half from each other, during which time Sigault ruptured the membranes and brought down the feet, which le Roy took hold of, and delivered her of a living child.

The woman suffered much from prolapsus of the uterus and vagina, she had incontinence of urine, and walked with great difficulty; these particulars, however, were not mentioned at the time, and it was some while before people were inclined not only to suspect that the child from its remarkable smallness might have been safely delivered without the division of the symphysis, but that in all probability it had of itself very nearly approached to a natural birth.

Le Roy, partly out of spite against Levret, Ruffel, and the other members of the Academy who had opposed the operation, and partly from his well known love of puffing, determined to use his utmost endeavours in blazing it about, and taking his due share of the credit. Sigault presented a report of the operation to the Faculty of Medicine, and requested a commission to examine into the circumstances of it. The patient, who, although the wound was healed, had remained lame, with a constant incontinence of urine, was presented to the Academy of Medicine on Dec. 1st, 1777. A sermon had to be preached on the section of the symphysis pubis, wherein it was extolled as a mercy sent from Heaven. It was published in all the newspapers of the day, and a printed report of the operation had to be sent to all the physicians and surgeons of the provinces, to the king and royal family, the ministers, the foreign ambassadors, and all the nobility of the land. A medal was struck by the Faculty of Medicine to commemorate Sigault, Le Roy, and Souchot; a hundred of these were sent to Sigault, fifty to Le Roy, besides which Sigault and Souchot received a pension from government.

The noise which was made about this operation induced several continental practitioners to repeat it, and from 1777 till 1779 eight sections of the pubes were performed, with the melancholy result that it cost the lives of four women, and of the rest two remained maimed for life; of the eight children, *only one was born alive*, and that very weakly. There is every reason to suppose that at least four of the patients might have been successfully delivered in the natural manner without division of the symphysis; and in the other cases, if the Cæsarean operation had been performed at a sufficiently early period, that *certainly* the children, and in all probability the mothers, might have been saved.

Successing years gave equally unfavourable results. The operation was performed in the most thoughtless manner, and with a degree of cruel violence which deserved the severest censure. The symphysis pubis was divided in cases where the pelvis was thoroughly well formed, and where those women who recovered from the operation were afterwards delivered several times without assistance, and with perfect ease and success; the skin and fat above the pubes were frequently divided, and it was then declared that the section of the pubes had been performed. The operation was frequently performed without even asking the leave of the patient or of her friends, and without having a consultation on the subject with other medical practitioners. It repeatedly happened that after the operation the pelvis, either where the bones had reunited, or after the death of the patient, was found larger than had been at first asserted; and Louis, the secretary of the Academy, mentions a case, where a practitioner had determined to perform the section of the pubes on a woman, the antero-posterior diameter of whose pelvis was affirmed to be only one inch in length; luckily, however, for the patient, whilst the operator was arranging his instruments, a full grown fœtus was born without any assistance.

Reviews.

Diseases of the Spinal Marrow. By R. B. Todd, M.D., Oxon.

THE subject treated upon in the present essay is one which the profession does not, we fear, properly appreciate:—it is one which in our estimation imperatively demands the closest attention, for we believe the spinal marrow to be a powerful source of disease. This opinion is based upon personal experience for some years—upon the facts which have been promulgated by numerous writers within the last ten years, especially by Dr. Brown, in an essay on spinal irritation, and by the very excellent works of Teale, Griffin, &c., who have, by accumulating facts and by attentive observation, established a position which is incontestable, that many anomalous

affections of the abdominal and thoracic viscera are referable to spinal irritation: this they have verified by multiplied examples. Many cases which, prior to the attention being drawn to this topic, were regarded as organic disease—as incurable disease, are now, thanks to the progress of science, discoverable and readily traced during life.

Pain in the side is not now necessarily a sign of consumption, functional derangement of the lungs, organic lesion:—a new aspect they are viewed in; they are, in short, many of them referable to functional aberration of the *spinal marrow* or its *meninges*.

Dr. Todd in his essay has compressed into a small compass the leading facts which have been collected on the subject, and has enriched them with his own judicious observations. He first takes a general survey of the anatomical and physiological conditions of the spinal marrow, and then traces the various morbid changes which it undergoes, in a methodical and philosophical manner.

We shall give the following extracts, as general and fair examples of the mode in which the Doctor has treated the subject:—

“The symptoms which result from inflammation of any portion of the spinal marrow vary according to the region in which the inflamed part exists. In the early stages there will be increased sensibility, more or less pain in the back, muscular spasm, and sometimes convulsion; as disorganisation proceeds, the sensibility becomes blunted, and paralysis of sense and motion ensues; sometimes there is no paralysis, but violent convulsions, and in such cases the fatal result ensues speedily. The progress of the symptoms is proportioned to the activity of the inflammation. Hence in some cases we have a train of obscure premonitory symptoms: pain in the course of particular nerves; formication; feebleness of muscles; sometimes a kind of subletus; deficient action of some internal organs which may be connected with the spinal marrow. If the seat of irritation be in the cervical region, difficulty of deglutition is among these precursory symptoms, and sometimes slight dyspnoea, which may end in complete asphyxia; but there is a remarkable variety as to the extent of the paralysis which follows disease in this region. In some cases it has extended to the four extremities, but in others it was confined to the upper, and in a few instances the paralysis affected the lower extremities only, although the upper part of the cord was most extensively the seat of disease. This fact has been regarded by some physiologists as proving that the several segments of the spinal marrow are independent of each other; though it is obvious that, if we admit the justice of this inference, a difficulty, perhaps as hard to be surmounted, will arise to account for the occurrence of paralysis from a lesion precisely similar in locality, extent, and nature. It is well known that the division of the spinal marrow in the neck of an animal leaves his four extremities

powerless; and that the dislocated cervical vertebra which so compresses the marrow as, if we may so speak, to stop the nervous current downwards, paralyses every part below it. Have we not, then, as much reason to infer from these facts, that the inferior-ports of the marrow are dependent on the superior, as to suppose them independent, merely from the occurrence of a few such cases as those we have alluded to? In the present state of our knowledge as to the connexion of the brain and spinal marrow, and their influences on each other, and on the organs of motion and sensibility, we are not authorised to form conclusions from data which, to say the least, are not completely established."

"*Treatment.*—There is no reason why inflammation of the spinal marrow should not be cured, but it is so very seldom met with in the first stage, that the practitioner has always to labour at a great disadvantage. In the treatment of inflammation of the spinal marrow, the antiphlogistic system must be rigidly observed; general and topical bleeding, with counter-irritation from blisters or stimulants of various kinds. Issues or setons are to be employed if the inflammation be of the chronic form. The tepid or the cold douche applied from a great height to the suspected region, has been known to be very serviceable.

"In the chronic stage we may expect to confer some benefit by the application of remedies. Perfect rest in the horizontal posture is, perhaps, the most necessary and useful measure, to which we may add the adoption of means to keep up a continued counter-irritation. Close attention to the digestive organs, a continued course of purgatives, combined with a mercurial, tepid or cold bathing, or the douche, will often be found useful. The strychnine, too, may be administered either internally or to a blistered surface through the medium of the skin.

"The effects of concussion of the spinal marrow seem to depend very much upon chronic inflammation. Concussion sometimes proves immediately fatal, probably in consequence of the altered circulation about the spine and the general shock to the nervous system, but in general no morbid appearances can be detected. It is possible that acute inflammation may follow concussion, but more frequently there are all the signs and symptoms of chronic inflammation, which in some instances disappear without any bad consequences. At other times the concussion is followed by some permanently morbid state of the cord, which causes permanent paralysis. Sometimes these symptoms continue from the moment of the accident, but at others the patient is taken up powerless, he recovers, and in a short time gradually relapses into a worse state. General paralysis has not uncommonly succeeded to this accident."

These two specimens will serve to accomplish the objects we have in view. They show Dr. Todd to be a fair and candid reasoner,

who draws his inferences from acknowledged and palpable data, and is seldom if ever led astray by the speculations of the theorist, or indulges in the wranglings of casuistry. We heartily recommend this treatise to the practitioner.

An Essay on the Tuberculous Diseases of the Bronchial Glands.—Prize Essay. By J. M. BERTON.

It has, for a long period, been a question with pathologists, whether or not there be lymphatic glands in the substance of the pulmonary tissue. The position has been affirmed by speculatists who never witnessed their existence, and negatived by casuists who never investigated the question. The history of *absurd doctrines in medicine* from the days of Hippocrates to the present century, would afford a most curious and a most interesting theme; for the exposure of errors is frequently the first step to the discovery of truth.

There was a notorious individual, though a clever one, who affirmed with the most unblushing effrontery, that phthisis was but tuberculous disease of the pulmonary glands—disease of structures which are really not in existence, and upon which sandy foundation he erected a very pretty little theory, but like all other such edifices, the first wave washed it away, and buried it in the abyss of the ocean.

One and the great object of the present essay is, to develop the various morbid changes to which the bronchial glands are liable. The author commences with a brief exposition of their anatomical relations, stating that they are situated around the bronchii, from the tracheal bifurcation into the very tissue of the lungs; and agrees with Haller that they are analogous in their structure and functions to other lymphatic glands; that they receive the lymphatic vessels from the lungs, heart, and the inner surface of the thoracic walls: being reddish in the young, brown before the middle period of life; and dark or black in old age—from it is presumed the absorption of carbon in the lungs. These structures may be affected with the diseases peculiar to their own system, or be implicated in those of the lungs. He states that those glands are more frequently diseased in infancy than in later periods; that they are subject to inflammation, which is usually chronic in its character, slow in its progress, and seldom terminates in suppuration;—this inflammatory condition is evinced by many of the symptoms of phthisis. Every cause which may produce irritability of the system predisposes them to disease. He has never met with a case of suppuration of those glands. Laennec asserts that he has met with but a *very small number*. He contrasts the number of cases of what he designates *bronchial phthisis*, in town and country—in the former they greatly pre-

ponderate. Children living in towns, and those who breathe the polluted air of hospitals, or who live in damp situations, are the most prone to enlargement of the bronchial glands.

In corroboration of those structures being converted into tuberculous tissues, he adduces the tubercles forming in the cervical glands in children during dentition, ophthalmia, &c.; the mesenteric glands becoming alike disorganised in cases of inflammation or other diseases of the bowels. "In like manner, in children, the bronchial glands inflame, and are transformed into tubercles after prolonged pneumonia or bronchitis."

The subject is one which really is little known in England. The author establishes beyond a criticism the following positions, from an experience on a large scale—from personal knowledge of numerous cases during life, and *post mortem* appearances,—that in all cases in children where there had existed thoracic inflammation the bronchial glands were disorganised to an extent in a ratio to the continuance of the disease. That when pulmonary affection had been but of short duration, the bronchial glands presented the following appearances: they were of a redder colour, were shining, and enlarged in size; that when the disease had existed for a longer period they had, in addition, tuberculous matter in their substance; and, lastly, in very protracted cases, the normal tissue of the gland seemed entirely removed, and its place occupied by tuberculous formation. These facts afforded the author interesting phenomena, inasmuch as they displayed the partial, the gradual, and the complete conversion of these conglomerate glands into tubercle; and they evinced, further, the substantive proof, that tubercles, if not the consequence—the very products of inflammation, were very closely allied to that particular condition. The characters of the natural and morbid structures are very lucidly depicted, and the line of demarcation between them in the second stage graphically defined and judiciously commented upon.

He next gives a table, showing the very close connexion between diseased bronchial glands and pneumonia, bronchitis, pleurisy, and phthisis, showing, most satisfactorily, that in all the latter affections those glands partake, and this in proportion to the extent of the ravages. He endeavours to prove that the signs of enlarged and tuberculous glands are obscure; that sometimes, when they become softened, ulceration takes place through the walls of the bronchii, and the matter is in this manner expectorated, giving, occasionally, evidences of pectoriloquy; not, however, frequently, for pectoriloquy in children is of rare occurrence. A number of cases are presented, showing perforation of the bronchii, œsophagus, and pulmonary artery, by matter from the bronchial glands. The following case will afford an example of the character of this disease.

"OBSERVATION III.—*Perforation of a Bronchus and the Œsophagus.*—Moreau, a girl, aged six years, admitted into hospital July 24th. She was always liable to take cold; the glands of the neck were engorged; she had a cough of several months' standing, but never kept her bed until eight days before admission. From that time she had much cough, fever, headach, and occasional vomiting.

"She presented the following appearance and symptoms:—Gangrenous state of the mouth (*stomatite gangreneuse*); pulse 120; some diarrhœa; frequent cough; no expectoration; muco-crepitating râle at the right side; slight dulness posteriorly at the same side. She died on the 14th August following.

"*Post Mortem.*—Adhesions of the pleura at the two inferior thirds of the right lung; some adhesions also at the left side. The superior lobe of the right lung posteriorly was found in a state of grey hepatisation. The mucous membrane of the trachea and of the bronchii was generally pale. On the left branches, half an inch from the bifurcation of the trachea, was a round perforation, half a line in diameter, communicating with another perforation lengthened from above downwards, having smooth pale edges, and situated in the œsophagus. This latter was a line and a half in extent, and two lines higher up than the preceding one; the communication between them was by means of an intermediate cyst, formed of resisting fibrous tissue; its internal surface was of a reddish brown colour. This cyst, the diameter of which might be considered at three or four lines in extent, had apparently belonged to a degenerated bronchial ganglion, whose softened tuberculous matter had escaped by the accidental openings we have remarked. The greater number of the other bronchial glands were slightly hypertrophied, and of a deep red; several of them were partly tuberculous. The subject of this observation had been ill eight months before admission, and had cough and vomiting. Could the perforations above described, the borders of which presented no traces of recent inflammation, have had their origin at the above named period?"

With respect to the treatment of such cases little is said. If the disease be recognised, and as it is always concomitant with pulmonary disturbance, the usual and appropriate measures are to be employed.

How such diseases of the bronchial glands should originate may be fairly assumed. Irritation in the foot will often create enlargement, inflammation, &c., of the *vertical* inguinal glands; the same will arise from irritation on the genitals in the transverse series of glands; in the axillary glands, from irritation in the arm; in the mesenteric, from disorder of the bowels—why not in the bronchial glands from disease of the lungs? The essay is an instructive one, and therefore worthy of perusal.

Medico-Chirurgical Review, April, 1835. . .
Medical Quarterly Review, April, 1835.

It must be obvious to every medical reader that the weekly journals are ever in advance of all others in the newness of their matter, medical or general,—this is natural; they contain every thing as it appears, and we humble individuals have the (not vanity) to believe that every thing new under the sun is brought the earliest in our journal before the public, it is at any rate our urgent desire to do so,—that we accomplish this we believe,—that we are anticipated by our contemporaries in any thing great or important we have no hesitation in denying. Our politics are liberal, our comments on new works, or new ideas are conducted with that fairness which ever characterises liberal minds, and every other topic must claim the warmest commendation. The two journals before us are both excellent of the kind, they contain many elaborate reviews, some of them finished,—reviews which give the very pith and marrow of the works reviewed, and they give the spirit of medical literature of the tri-monthly period in a very fair and satisfactory manner. They are, however, we must confess as honest journalists, deficient in the very important requisite of our Edinburgh contemporary in those materials which it is so eminently furnished, viz.—need we state the essays from the *Medico-Chirurgical Society*? We do trust that the *Royal Medical and Chirurgical Society* of London, with its blushing title, and the talent it contains, and the liberality of many of its members will, instead of publishing occasional reports of transactions, permit the various journals, not one but all, the full liberty, their full accordance to send to the world those discoveries, those doctrines which, owing to the rapid progress of medicine, must involuntarily emanate from that society. In good humour and kindness we suggest this, it would redound not less to their philanthropy than to their liberality to do so. They would be conferring a large boon on the profession and on the public. Some of their articles may be laid under contribution in our next number.

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The Edinburgh Medical and Surgical Journal, April.

In the *Edinburgh Journal* of the present month we find some cases so apposite to the subject we have been discussing in the *Essay of Berton's*, that we feel it necessary at the same moment to allude to them; and the first article we shall advert to is one by Dr. Christison, and when we say this there is not perhaps an individual in the profession who will not respond his approbation to the excellency of that physician. To accumulate facts and to record them require no other qualities than those of patient observation and great industry, to generalise the facts thus adduced, and to deliver them before an acute profes-

sional ordeal, demand a mind of a higher cast; the positive philosophic mind, if we may employ the phrase, deals not in details but in principles, he glances at the facts but forgets not the principle. Nature has constituted the mind in a singular manner, she has made it a chaos of inconsistencies, here it exhibits a wildness of exuberance, there a barren soil, there fertile in brambles and bulrushes, now a scene of all that the judgment could desire, or that the imagination could aspire to. This is a digression. Let us leave the topic to abler commentators.

Case of Empyema and Pulmonary Tubercles, illustrative of the Connexion between Tubercular Deposition and Chronic Inflammation.

BY ROBERT CHRISTISON, M. D.

The subject of this case was a girl, about 6 years of age, who, after scarlet fever, was attacked with a pulmonary affection, she exhibited the indications of chronic pleurisy and subsequently of empyema, was tapped twice for hydrothorax. The attack of scarlet fever was accompanied by a cough, which was but slight, but at the termination of a fortnight the symptoms of what appears obvious was an attack of pericarditis, there was pain at the left side of the sternum; great difficulty of breathing; cough more troublesome; frequent perspirations; scanty urine, &c. After eight weeks she was attacked with distinct pleuritic effusion of the right side, where great dullness was indicated on percussion. The left side exhibited also some signs of aberration. The right side showed in every part the entireness of respiration, but more feeble than natural, so that it was presumed the sound arose from an increased bronchial respiration of the left side, which was transmitted through the accumulated fluid.

The constitutional symptoms were urgent, hectic having completely set in with its endless train of distressing attendants. Local applications, diuretics, and expectorants having failed, and the dyspnoea becoming more harassing, the chance of puncture was taken advantage of. After twenty ounces had been withdrawn, and the aperture was closed by a compress and bandage, considerable relief was experienced, the right side became of equal circumference with the left, and respiration became audible in the upper fourth of the empyematic side. On the second day improvement was still going on in that side, the sound on percussion becoming pretty clear in the superior region. The disease, however, soon returned to its former state, and the constitutional disturbance was manifestly much increased.

It being the opinion of the Doctor, that the girl evidently could not survive above a day without the most decisive measures being resorted to, he again punctured the chest. Twenty ounces of thinner pus were drawn off,

which again rendered her condition more easy and supportable for a day or two. This, however, was but temporary, for all the previous symptoms returned, and four days after the operation she expired.

Inspectio cadaveris.—The lung in the upper fourth of the anterior part of the chest was crepitant and pervious to the air. Below, however, it was greatly compressed, and contained partly pus and partly coagulated blood. The entire lung was bound down by a membrane of old coagulable lymph, thrown out from the pleura. Much serum, with lymph flakes, were found in the left pleura. A large quantity of thickly studded tubercles, smaller in size than a lentil, occupied the whole of the left lung. So also the upper part of the right lung presented the same appearance,—was not compressed. No softening was discovered in any of the tubercular masses; the condensed flattened portion of the left lung was wholly destitute of the tubercular deposition, and seemed perfectly healthy; the serous membrane of the abdomen presented a healthy appearance, no effusion being found in its cavity. From the history of the foregoing case two points of interest present themselves. In the first place, there was evidently tubercular deposition occurring in connexion with chronic inflammatory action. The former being in all probability deposited during the prevalence of the latter; and, from the facts supplied by this case, it is not an unnatural conclusion to arrive at, (an opinion which is daily gaining ground among pathologists,) that tubercular effusion sometimes originates in chronic inflammation, being one of its terminations in persons of unsound constitution. In the second place, the appearances illustrate very well the effect of uniform pressure on an internal organ in preventing the progress of disease in its texture.

The next is a case of

Tubercular Deposition of the Lungs terminating fatally, without proceeding to Softening.

BY DAVID CRAIGIE, M.D., F.R.S.E.

J. H. æt. 22, a young man rather stout, and of swarthy complexion, had been in the enjoyment of good health, till the twenty-first year of his age.

In the beginning of January, 1827, he became occasionally subject to wandering pains in the sides, with a tickling cough, and difficulty of breathing, on making any muscular exertion. His pulse was at this time about 90, varying, however, sometimes to 100. Mere mucus only was expectorated, and that, too, not very opaque.

Notwithstanding medical treatment, his symptoms became aggravated. His pulse, never below 90, continue to vary from 96 to 100. The pains of the chest, which were principally felt in the left side, became more frequent, as also did the cough, and the expectoration of mucus more copious, but the patient's most constant complaint was of a

craving vacuity, referred to the region of the stomach. Till within six weeks, however, of his death, he did not abandon his usual pursuits.

About the middle of August, the rapid confirmation of his bad symptoms confined him entirely to the house, but, up to the 27th of September, he continued much in the same state, with only an occasional diarrhoea and a slight increase of night and morning sweats, to which, from the commencement of his disease, he had been subject. On the 28th his respiration became so difficult and laborious, as to oblige him to relinquish the horizontal posture. At the same time, his countenance was indicative of much anxiety, was very livid, as were also his lips and nails, and the pulse had risen to 120, being likewise intermittent. On the 1st of October death closed the scene of his sufferings.

The treatment adopted in this case was prompt and decisive. General and local bleeding, antimonials with opiates, blisters, and tartar emetic ointment, were among the first and most energetic remedial agents. Laxatives presided over the bowels, whilst tincture of foxglove was administered to promote the secretion of urine, and at the same time with a view of diminishing the heart's action. Throughout the disease, the matter expectorated, though carefully watched, was never found to be opaque or puriform, neither did it ever sink in the water in which it was discharged.

Post Mortem Appearances.—On raising the sternum, it was observed that the right lung was occupied by minute indurated bodies, especially towards its superior portion, which was also condensed, inelastic, and uncrepitating. The substance of the superior portion of the same, with the exception of being rather more solid than usual, did not present any thing very remarkable. The inferior half was perfectly firm and consolidated, like a portion of liver, of a deep red brown colour, some portions being almost black, and was divided from the superior portion of the lung by a transverse line, very accurate and well-marked. The pleura pulmonalis in different situations presented considerable adhesions.

The tubercular bodies were small and in minute masses, and presented an irregular shape. Not one of them had proceeded to softening, and in no part of the lung or the larger bronchi, could a particle of purulent matter be recognised. Throughout almost the whole of the left lung were sprinkled hard granular bodies. Its substance at the same time being inelastic, condensed, and uncrepitating, though not so much so as that of the right lung. Neither in its bronchial ramifications was there any trace of puriform matter. The heart presented nothing strikingly morbid. The liver was loaded with much dark-coloured blood, but its substance was not preternaturally large or hard. The stomach was a little shrunk, and exhibited some vascularity towards its cardiac portion,

its rugæ being less distinct than in ordinary cases. The intestines were generally healthy.

The remarkable circumstances characterising the above case, is that the lungs presented no tubercular excavations, and consequently, that throughout the disease, no puriform or tubercular expectoration took place; and, as Dr. Craigie remarks, the whole affection of the chest appears to have been more of the nature of chronic peripneumony, than of common tubercular phthisis.

Indeed its progress was marked by less emaciation and debility of the muscular system, than are usually the offspring of the latter disease, wherein the tubercular deposition undergoes the process of softening.

The Doctor terminates the history of the case by observing that the tubercular deposit with the consolidation, and other marks of inflammation of the lung, may be conceived to indicate that the former is the effect of the latter, and, in consequence, proposes the following question.

“Whether there be not reason to believe that in similar cases the tubercular deposition pre-existed, and operated as a predisponent cause to the production and maintenance of the chronic peripneumonic disorder, and its usual effects?”

FOREIGN MEDICAL LITERATURE.

Memoir on the Configuration of the Brain of Man and of Mammiferous Animals. Read at the Royal Academy of Medicine, 7th March, 1835,

BY M. LEURET.

ANATOMISTS long believed, and a great many of them still believe, that there exists no regularity in the number and direction of the cerebral circumvolutions of man, and even amongst encephalotomists, one of them only, Roland, has described and represented them with any thing like accuracy. Those of animals have been even less studied. Gall, who has designed many more skulls than brains, while assigning to the circumvolutions very distinct functions, altogether neglects their anatomy. Vimont, the disciple of Gall, has shown so little fidelity in his designs of them, as to give to the Sylvian fissure of the brain of man, for example, 120 millimetres in length to the right, and 30 to the left side, a difference which nature never yet made. Nor are the plates of M. Serres by any means satisfactory on the point. M. Tiedemann is, perhaps, the only one who has given a faithful representation of the brain of the mammiferous tribe, but without making the deductions from it, to which a profounder research has led me.

The brain of all mammiferous animals, except the class of ruminators, has a determinate number of circumvolutions, the same in the same species, and their general direction the same of whatever species or class they may be; those to the right are found also on

the left, with slight differences, which differences themselves are almost invariably the same. In man, the elephant, and the ape there is no such general uniformity, their cerebral circumvolutions are altogether *sui generis*. In man they are constant and well defined, varying only in detail; in the elephant, if I may judge from the only example I have yet had an opportunity of studying, they are very analogous to, if not exactly like, those of man; in the ape also they are found, but with the same difference of perfection as between the external conformation of that animal and that of man. Then, if what I have advanced be true, that there is exact conformity of brain in all the mammalia tribe, an example of one of the simplest conformation will best illustrate it.

The fox presents an instance of extreme simplicity in his cerebral circumvolutions; four form the exterior surface, clearly separate from each other and superposed; the most exterior very small, bent back on itself, forming by the bend the fissure of Sylvius, above that a longer and larger, a third and a fourth, this last forms the posterior and superior ridge of the lobe or fold; no depression in the first; a slight furrow in the second; in the third a depression in the hinder part, indicating a beginning of separation; a depression in the fourth, and anteriorly a deep furrow. These four circumvolutions are united before and behind; immediately in front there is besides a small triangular circumvolution partly covered by the olfactory nerve, but nothing more is observable externally.

On separating the two lobes, raising the cerebellum, and dividing the corpus callosum, and all the mediant subjacent parts, a pyriform eminence is seen below and behind, which, at an elevation rather short of the posterior ridge of the corpus callosum, terminates in two prolongations; the one external and above, forming the fourth circumvolution already named; the other internal and below, covers the corpus callosum, forms the anterior point of the brain, and bends back to the level of the inter-crossings of the optic nerves: these two prolongations unite in front, and are separated in the middle and behind by a deep furrow. Thus, four circumvolutions on the convex surface, one in front and one within, constitute the whole cerebral periphery of the fox. Very nearly the same simplicity of conformation is found in the dog, wolf, bear, coati, otter, cat, panther, hyæna, and lion; the fundamental principle of it being always the same, the shades of difference very slight. With the herbivorous and ruminating class, the circumvolutions have a special character; they are undulated, not readily distinguishable, do not bend back on themselves, are more spreading, their extremities widening asunder as they advance; whilst the reverse is the case with the carnivorous; the wild boar, hog, and peccary, present the transition between those two classes.

In the brain of carnivorous animals the divisions increase in proportion as it enlarges; thus the brain of a wolf is more divided than that of a fox, of a full-grown fox more than that of a little one; not so with the herbivorous tribe; the brain of an ox has no more divisions than that of a sheep which is of less volume, and it has fewer divisions than that of a horse which is of equal volume. As to the internal circumvolution which, originating behind the corpus callosum, passes over it to the anterior point of the brain, in the fox it is integral, but divided in the dog and wolf; with the herbivorous it is double in the two posterior tiers of its extension, treble in the anterior tier, forming in front of the corpus callosum a cerebral mass of considerable size. Two important considerations here arise—

1st. At the point where the internal circumvolution continues itself with that of the superior external, a *diverticulum* is formed, which in man is called by phrenologists the *organ of reneration*; this organ then is found in all the mammalia that have circumvolutions.

2nd. At the most extreme posterior point of this circumvolution we find it rising to the upper part of the lobe, thus placing itself between this venerated organ and the posterior lobe of the brain. This disposition, rudimentary in the rest of the mammalia genus, acquires a certain development in the ape, and complete development in the elephant and in man, and forms for the internal part of the lobe a kind of repetition, the complement of the transverse circumvolutions which remain to be described.

In almost all the mammalia the same circumvolutions extend from the anterior to the posterior part of the brain without interruption; but in the ape, the elephant, and in man, this continuity is solved. From the anterior margin of the great Sylvian fissure several circumvolutions arise, which, bearing upwards and backwards as far as the middle large fissure of the brain, cut the others across and divide them into anterior and posterior circumvolutions. Three of these transverse circumvolutions are commonly found in man; three also I found in the elephant I examined; the ape has ordinarily one only, but sometimes two.

From the foregoing facts it appears that the circumvolutions of the brain of the mammalia may be divided into three groups; those of man, the elephant, and the ape into four; with the additional circumvolution to all, passing over the olfactory nerve, and ordinarily found integral in the carnivorous class, but divided in man and the herbivorous, and which, from its position, I shall call the sub-orbitaly.

The first group is composed of the two most external circumvolutions, and properly, therefore, may be called the *external circumvolutions*; the second, of the two circumvolutions superposed on the first, which I shall name *medial circumvolutions*; and the third group

of the circumvolution, single or otherwise, found above the corpus callosum, *internal*, but with reference to man, the elephant, and the ape, *transverse circumvolutions**.

But how will phrenologists approve of these facts? The organs which, according to them, indicate philosophy, learning, and science, are, alas! ever found in the sheep, the ox, the goat, the horse, and the ass! An English phrenologist, Mr. Holm, much puzzled on finding in the brain of a cat the *organ of individuality*, began to suspect that, *perhaps*, that organ had *there* some other use. This was a very prudent *perhaps*, and may be found most available in phrenological research.

And as well with the posterior as with the anterior portion of the brain have these philosophers made havoc. Here we find the organs of courage, of theft, and of ferocity; the poor sheep then, having circumvolutions analogous to those of the wolf, ought, in strict phrenological propriety, to have a tolerable inclination to theft, with courage and carnivorous propensities enormous; and the transverse circumvolutions, peculiar, as we have stated, to man, the elephant, and the ape, are happily twisted into organs of resolution, of conscientiousness, and hope. But of what avail are all these fantasticalities, and whence do they arise?—From the study, I apprehend, of skulls rather than of brains, and from the credulity of ignorance and folly: it is also much easier and more convenient to believe than to verify. Yet, even had skulls only been really and thoroughly studied, something might have been gained, some error rectified. To the strong lateral development of the skull of the rabbit, the same as that of the carnivorous tribe, what says phrenology? The skull of the dolphin, rising to a point with a transverse diameter of 148 millimetres by 93 antero-posterior, no doubt indicates fanaticism and cruelty, and ought to be the skull of an inquisitor, not of the creature surnamed by the elder Pliny “the children’s friend.”

But I do not propose to enter further into the details of phrenology. If I have demonstrated the analogy of cerebral conformation between animals differing widely in instinct and faculty—if I have clearly shown that the same parts exist in all of them, I have nearly established the certainty that each of these parts cannot have distinct and special functions, and that, consequently, the phrenological doctrine is utterly without foundation. It however by no means follows that there is no relation between

* To verify the constancy of these general dispositions, it is expedient to use the precaution pointed out by M. Leuret, namely, to harden in alcohol or other means the brain intended for examination, stripped of its *pia mater*; the circumvolutions then separate easily, each group becoming distinct, and there is no risk of mistaking slight depressions for real divisions.—N. du R.

the cerebral conformation and the instinctive, intellectual, and moral faculties; but that relation is yet to be discovered.

Analysis of a Memoir on the Chlorides of the Oxide of Sodium or Calcium employed in Burns. Read at the Academy of Sciences, March 16, 1835.

BY M. LISFRANC, SURGEON TO LA PITIE.

The number of medicaments in use for burns is immense, a simple enumeration of them even would press too hardly on the complaisance of the Academy; I will therefore only recal the fact, that the cure of burns has almost always been an operation of time and difficulty, and that medical men have hitherto frequently considered them mortal, if of extensive surface, even when not deep.

In the year 1825 I tried a new species of medicament for the purpose, and the Academy will judge whether the results obtained are advantageous. My method of treatment has already been many times published in the scientific journals, also in some modern works, has been commented upon, misunderstood, and rendered confused and obscure, in spite of all the pains I had taken to elucidate the matter in my clinics at the Hôpital de la Pitié; in short, the chlorides of the oxide of sodium or of calcium have been denominated *quack nostrums*; but abuse is no argument against its use; and, when the power of a medicament is not understood, ignorantly or injudiciously managed, danger may result; a recapitulation of facts may therefore prove not unimportant.

The chlorides of the oxides of sodium or of calcium are astringent and sedative; they not only prevent the increase of inflammation but dissipate it entirely, and, in the course of a few hours after their application, the sufferings arising from the enervated state of the patient are considerably lessened, sometimes the effect is immediate.

When there is solution of continuity without scab, the chlorides are eminently efficient, as they cause an immediate plastic exudation, which, forming itself over the surface of the wound, in a short time closes the solution: this new tissue commonly develops itself from the circumference to the centre. And not only do the chlorides thus operate in cases of comparatively slight injury, but when it is excessive, when the scabs have fallen and the fleshy pimples are strongly developed. Further, it is important to notice, that a cicatrix thus formed is more solid than when it is obtained by other means. Consequently, should there be ulceration in the lower part of the leg, the integuments cannot become too much tightened, or drawn by the contraction of the muscles; and, as my experience has often demonstrated, this mode of cicatrization resists greatly the progress of the cure. Besides, when the cicatrix is formed, there is still, we know, to work its better organisation; and

that, in proportion as it dries, so does it contract. The contraction of those formed by the action of the chlorides is not so great.

It has been asserted, that the chlorides, from whatever cause, greatly facilitate the fall of the scabs; this is a gross error. Facts demonstrate that if the inflammation is great and phlegmonous, the chlorides augment it almost always; and thus baffle their proposed use; if on the contrary, the phlegmasia is slight, the chlorides lessen it too much, and the work of elimination is retarded—particularly with individuals of spare habit, and where the scab is hard and dry. In truth, the chlorides are rather hurtful than useful when the gangrene proceeds from excess of inflammation, and when, despite of the death of a certain extension of the tissue, the phlegmasia still continues to a high degree.

The chlorides succeed most especially in the first and second degrees of burns. When we first began to employ this medicament we doubted much its use in intense inflammation; but experience has proved that it is not less efficacious when the phlegmasia is only superficial. We should not have sufficiently insisted on its value with respect to scabs, if we had not observed that in the other degrees of burns this medicament, employed before the phlegmasia becomes intense, diminishes the pain and inflammation;—a remarkable case in proof of this may now be seen at the Hôpital de la Pitié.

It is said that art consists entirely in details; never was truth more certain, nor more certainly felt by all who have cultivated surgery with success. Were we empirically to boast of our medicament as a sovereign specific against burns, without indicating, both generally and particularly, its degrees of power and use, we should put into the hands of our brethren (and that has happened) a weapon which not only would often prove useless, but sometimes dangerous.

The chlorides in general use are at three degrees by the chlorometer of M. Gay Lussac; but in the inflammation and the idiosyncrasy of the skin there is great variety. If the chloride, at the degree named, produce no sensation, it is not sufficiently active, and must be raised to four, five, and sometimes even to six degrees. But if the application of the chloride determines a pruritis and painful heat, lasting more than a quarter of an hour, the medicament has too much energy, and may augment the inflammation; the apparatus must therefore be removed, and the degree lowered to two, or perhaps one. The desired effect can never be produced if the pruritis and heat which the chloride occasions are prolonged beyond five, ten, or fifteen minutes.

In our first trials of the medicament we applied it to all the suffering parts, whether denuded of skin or not; and we quickly perceived, that where the rete mucosum was laid bare, there the cure was quickest, and, consequently, that the epidermis checked the activity of the chloride; hence the utility of clear-

ing it away as much as possible, which may be done and scarcely any pain determined, by using precautions quite superfluous to mention here.

A sieve-like compress, spread with the cerate of Galen, is applied all over the surface of the burn, and surmounted by a mass of lint, two inches thick at least, and saturated with chlorine, over which are adjusted dry compresses, and the whole covered with a suitable bandage.

In winter, if the burn is of extensive surface, and the stupor of the patient very decided, the perforated compress must be warmed before it is applied; and in every case when the burn is large, care must be taken to dress it by degrees; according to the temperature of the atmosphere, the bandages, &c., must be wetted with the chloride six or eight times a day at the degree indicated, and the dressing renewed every twenty-four hours.

The use of the chlorides of oxide of sodium, or of calcium, as a medicament for burns, was first suggested to me by the following circumstance:—

The patients were covered with burns of the first and second degree; at least two thirds of the whole surface of the integuments. The first day I followed the precepts recommended by surgery. I opened the blisters formed at their most inferior part, and applied the perforated compress with Goulard ointment, with lint above it. The following day the inflammation had increased to intensity; already the reaction had taken place on the intestinal canal; the patients were drowsy, and gave every other indication of the whole economy being profoundly affected, and, according to the opinion of some practitioners who have written lately on burns, they were doomed almost to certain death. It was at this moment that recollecting the success I had obtained with the chlorides in the treatment of ulcers, I determined to try their effect on these unhappy patients; I did so, and my success was complete.

It is verified by observation that death may ensue from burns of the first degree covering the whole surface of the integuments; but no fatal termination has occurred to my experience from burns of any degree since I have employed the chlorides as a medicament.

From the foregoing statements it results,—

1st. That the chlorides of oxide of sodium or of calcium, employed according to the directions stated, completely relieve the pain, lessen the inflammation and enervation, and prevent reaction on the system.

2ndly. That the chlorides cure more promptly.

3rdly. That they facilitate the fall of the scab.

4thly. That they cause the most advantageous cicatrisation.

5thly. That they often obtain the cure of patients doomed to certain death, if the usual means of cure had been employed.

Analysis of four Memoirs read at the Institute of France.

BY M. VELPEAU.

At the meeting of the Institute, March 16th, M. Velpeau presented four memoirs, one on acute diseases of the throat, especially inflammation of the tonsils; another on inflammation of the mouth, caused by pinching a portion of the gum between the molares; the third on burns; and the fourth on the diseases of the lymphatic vessels.

Angina Tonsillarum.—The object of M. Velpeau's first memoir is to demonstrate that powdered alum, applied by the finger to the part affected, very seldom fails to cure acute inflammation of the throat in a few days. The efficacy of this remedy, says the author, is as marvellous as it is rapid. Employed the first, second, third, or fourth day, while there is yet no abscess in the tonsils, it arrests all symptoms, as it were, by enchantment; the fever abates, the swelling diminishes, the appetite returns, and the convalescence is quickly decided and complete.

Alum had already been in use for certain disorders of the throat; in malignant inflammation, for example, then in chronic; but as the greater number of practitioners remained fixed in opinion that it must be dangerous in common inflammations, its use was not so extensive as it deserved to be. By showing that this remedy is as powerful in simple inflammation as in inflammation of the tonsils, M. Velpeau hopes that practitioners will no longer hesitate to make proof of its efficacy, and rescue thereby hundreds of human beings from the grave.

Inflammation of the Mouth caused by Pinching a portion of the Gum between the Molares.

—In the second memoir, M. Velpeau treats on a malady not hitherto described, though frequent enough, and the cure of which is alum also. It is an inflammation commonly very acute in the internal front of the cheek, quite at the bottom of the mouth, and very soon accompanied by swelling, pain, and throbbing in the neighbouring parts, impossibility of extending the jaws, foetid breath, and sometimes fever. The cause of it is found in the pinching or chewing, as it were, a small portion of the mucous membrane which intrudes itself between the molares. The usual treatment by emollients, bleedings, &c., may prolong the evil indefinitely; but by the aid of powdered alum, the cure is effected in the course of three or four days. As in the case of inflammation of the tonsils, all that is necessary is, to touch the surface of the affected part with the alum morning and night.

Treatment of Burns.—In the third memoir, the author shows that each proposed remedy for burns bears only on a certain degree of

the malady; that cold water and resolatives, for example, good in the first degree, are of no avail in the third or in the fourth degree; that the solution of chloride of lime, of soda, about which some surgeons take to themselves no small praise, are, in fact, of no more real efficacy than cold water, or the solution of the extract of lead, but that a remedy of decided and equal efficacy in the four first degrees of the malady may be found in the dressings of gum diachylon.

M. Velpeau affirms that with this dressing, renewed only every third day, burns of the first degree are cured immediately; those of the second, in four or six days; those of the third, in eight or fifteen days; and those of the fourth degree, in from fifteen to thirty days: the cicatrix is formed by dessication from a number of points at once, not one after the other, or from the circumference to the centre, as is the case under the influence of all the other medications.

Maladies of the Lymphatic Vessels.—M. Velpeau's fourth memoir is part of a large work on the Maladies of the Lymphatic System. The author's observations have led him to results which appear to him important in regard to pathology and therapeutics. Thus he has found that inflammation of the lymphatic vessels having almost always been confounded with erysipelas, inflammation of the veins, and some other phlegmatic obstructions, caused the uncertainty which still exists with reference to the treatment of these latter affections, as that suitable to phlegmasia of the lymphatics applies not to the other inflammations.

Fifteen times in twenty I have observed the obstruction of lymphatic ganglions preceded by inflammation or suppuration in some other point; the glands of the neck in the scrofulous, for example, are the consequence of former maladies of the head or the mouth; those of the arm-pit relate to similar wounds of the hand, arm, or chest; those of the groin, to an affection of the lower members, or to the sexual organs.

One consequence may be deduced for practice, namely, that with children, among others, it is important that all suppuration should be dried up, all inflammation of the head subdued, instead of the practice which is so often adopted, when menaced with scrofula.

DEVONPORT AND STONEHOUSE DISPENSARY.

At a meeting of the Governors of this Institution, on Saturday, the recommendation of the Committee not to fill up Mr. Watson's vacancy, and to reduce the surgeons to the original number of six, was unanimously adopted.

SINGULAR CASE OF POISONING BY A SPIDER.

ON Tuesday, Feb. 3rd, John Bogle, Old Harbour, and Port Royal, pilot and fisherman, went to Salt River for the purpose of fishing. Having drawn the nets on shore, and feeling himself fatigued, he laid down on the beach to sleep, having previously taken off his wet trousers. On waking about 3 P.M., he felt a particular itching under the pit of the right arm, and on examination found that he had been bitten by a sea spider, probably of the tarantula species. On scratching the place rather violently to appease the irritation he appeared to communicate it to the whole of his body, and, as he himself describes it, directly he rubbed the place, it shot over him, and his extremities were completely benumbed. Shortly after the right side, where the bite had been inflicted, became paralysed, and feeling himself increasingly unwell, he desired his men immediately to row him home to Old Harbour. He reached there about 7 o'clock P.M., and by this time the pain had increased greatly, and the whole of his animal system appeared impregnated with the poison; and at eight o'clock, when the writer saw him, he was foaming at the mouth, and his eyes were rolling wildly from side to side. There appeared to be a strong determination of blood to the head, and he was talking in a very unconnected manner. Some coloured people, two of whom had been previously bitten, and who understood the nature of the disease, had administered a dose of castor-oil, and were rubbing him with an embrocation composed of bruised ginger, pepper, and cinnamon steeped in brandy, to excite a counter irritation. This appeared to compose him, and, the paroxysms being less violent, he appeared disposed to sleep.

11 P.M. pains had returned with increased violence; the extremities were quite benumbed, accompanied with general rigidity of the muscular system; cold sweats stood thickly on him, which required continual wiping off; insensible to every thing around him, except at distant intervals; complained much of burning pain in the head, and shooting pains throughout the body.

At midnight medical aid was procured, and he was bled; the blood was in a bad state, and flowed but slowly; a strong dose of calomel and jalap was administered, which, in the course of an hour, operated powerfully. Hot bricks and bottles of heated water were applied to the stomach and feet, accompanied with general rubbing. This had a salutary tendency, and life began to appear at the extremities.

Wednesday, 6 A.M. Considerably relieved; was able to account for the circumstance, and knew those around him; the right side still benumbed, and the feet cold. Was put into a warm-bath, and as the morning advanced

drowsiness came on, from which he awoke about noon, much refreshed. Throughout the afterpart of the day he continued to mend, and he is now in a fair way of recovery.—*Jamaica (Kingston) Chronicle.*

THE MEDICAL LIBRARY, LIVERPOOL.

THE medical gentlemen of Liverpool have been for some time endeavouring to provide themselves with a suitable building for the reception of their library, with an intended pathological museum and accommodation for the meeting of the profession and the Medical Society. In furtherance of this object, the following appeal is made to the public, from whom pecuniary assistance is solicited, to enable the projectors to carry their plan into effect:

“The medical profession, feeling most anxious that their intentions in erecting a building for professional purposes should not be misconceived, either by the public or any member of their own body, beg respectfully to state, that their only object is to provide themselves with a suitable and permanent building for the reception of their extensive and valuable library, for a pathological museum, and accommodation for the meetings of the profession and the Medical Society.

“The Common Council having most liberally presented the profession with a piece of ground in Duke-street, well adapted to their purpose, and they having raised a considerable sum amongst themselves, are anxious that the present favourable opportunity of carrying their wishes into effect should not be permitted to be lost.

“They regret, however, that they cannot by themselves alone erect a building to the extent that would be desirable or necessary, without greater pecuniary sacrifices, individually, than they would be justified in making, and are therefore under the necessity of appealing to the liberality of the community, to enable them to do so in a manner satisfactory to themselves, and creditable to the town.

“The advantages which must arise from the extended means which will be thus afforded of obtaining professional information, and of the facilities which will be thus given to the meetings of the Medical Society, where the experience of the senior members is so readily communicated to the junior, in all matters of difficulty or doubt—advantages which must necessarily extend their influence to the public generally, are too obvious to require to be dwelt upon.

“They therefore venture to hope, that the appeal, in so laudable an undertaking, of a profession which has ever shown itself ready to encounter all hazards, at the call of humanity and public duty, and whose long, zealous, and gratuitous services in all the public charities of the town give it so strong a claim to the assistance of a wealthy and liberal community, will not be made in vain.”

Reports of Societies.

ROYAL INSTITUTION,

April 3rd, 1835.

Electricity.

PROFESSOR RITCHIE delivered a lecture on the various theories which have been advanced in reference to electricity. He explained the opinions of Franklin, who considered that a body was positively electrified when it possessed a plus quantity of the electrifying fluid, and that it was negatively affected, when it had only a minus proportion. This theory he showed to be incompatible with the results of certain experiments which have been made since Franklin's time, and he gave his support to the doctrine which considers electricity as consisting of two fluids, which, by certain processes, can be separated from each other. The lecturer then proceeded to make some remarks on the electrophorus, the Galvanometer and on Voltaic electricity, and finally concluded by drawing the electric spark from the magnet. In further confirmation of the observation of Dr. Faraday on a previous evening, he remarked that if a long coil of wire be wound round the magnet, a powerful shock would be obtained, but no spark; if a short coil be employed a spark could be procured, but there would not be any shock. There was little novelty in any part of the lecture.

The Professor, we regret to state, spoke in a very low voice, and was at times almost inaudible where we sat, an inconvenience which was greatly increased by the constant opening and shutting of the doors of the theatre, even long after the lecturer had commenced.

ROYAL COLLEGE OF PHYSICIANS.

Monday March 30th, 1835.

DR. TURNER in the Chair,

The paper first read was written by Dr. Watson, of the Middlesex Hospital, and forwarded through Dr. Hawkins: it was entitled “Observations upon the Connexion of Hypertrophy of the Heart with Cerebral and Pulmonary Hæmorrhage.” Our readers will recollect that at a previous meeting at the College a paper by Dr. Hope was read, in which that physician essayed to prove that hypertrophy of the heart and apoplexy were not unfrequently conjoined as cause and effect. Dr. Watson does not deny that such may be the case in some instances, but he is further of opinion, that cerebral hæmorrhage and hypertrophy of the left ventricle may co-exist as the effects of another disease, to wit, of the aorta and larger arteries. As man advances in years, and in earlier life in the spirit drinker, albuminous and ossific deposits take place in the coats of the arteries indicating a diseased condition of these vessels, rendering their calibre of less size, and their bore unequal,

and to this cause the Doctor is inclined to attribute the cardiac and the concomitant cerebral disease.

The essayist extended his researches to another subject, connected with, but not wholly dependent on, the preceding, namely, the disease called by Laennec and others pulmonary apoplexy. Dr. Watson objects to the term apoplexy as applied to hæmorrhage in the lungs, as tending to cause an assimilation in idea with cerebral hæmorrhage, and he draws a wide distinction between the two, the latter being caused by the rupture of a blood-vessel, the former by exhalation from the mucous membranes, the blood being forced by the efforts at respiration into the lobules. He also differs from most writers as to the cause he assigns for its production. Those who have assumed that hypertrophy of the left ventricle will induce cerebral apoplexy, by giving an undue impetus to the blood in its passage to the brain, have, reasoning by analogy, taken it for granted, that pulmonary apoplexy must be caused by a similar hypertrophy of the right ventricle, but Dr. W. is inclined to attribute its occurrence to a contraction of the left auriculo-ventricular aperture, or to an obstacle at the mouth of the aorta, thus mechanically impeding the return of the blood from the lungs. Dr. Watson's data are founded principally on pathological investigations.

A paper by Mr. Mayo, of the Middlesex Hospital, followed, headed "On the Cause of some of the Symptoms which attend Diseases and Injuries of the Brain." Mr. Mayo commenced his paper with a summary of the cerebral physiology, and, in applying it to the examination of disease, put five questions, which with the answers contain the pith of his essay.

1st. In what manner, or through what kind of influence, does a lesion of the brain produce palsy and numbness? Mr. Mayo rejects the belief that palsy is to be attributed to a withdrawal of the nervous fluid from the part paralysed in consequence of the lesion of the brain, and considers that it is caused by a new and withering influence transmitted from the diseased part of the cerebral mass to the origins of the nerves.

2nd. How does it happen that a lesion of one side of the brain invariably produces palsy of the opposite side of the body? The essayist answered this question by attributing it to a decussation of the fibres of the anterior pyramids in the medulla oblongata. He assumes as a fact that the paralytic seizure invariably affects the side opposite to that where the cerebral lesion occurs,—a statement which the records of pathology do not allow, inasmuch as several cases have been published, and by talented practitioners, where the paralysis affected the same side with the diseased cerebral structure.

3rd. What reason can be assigned for the facts that in total hemiplegia from cerebral lesion, the palsy of the leg is less complete,

and capable of being more quickly recovered from, than palsy of the arm? The explanation Mr. Mayo offered on this subject was in illustration of his doctrine of a withering influence, he considering it feasible and correct that the part first reached by the influence should be more severely affected than the lower extremities, and slower in recovering from the shock.

4th. Why, in a slow attack of palsy, are the muscular weakness and the numbness first felt in the extremity of the affected limb? Why in the hand before the fore arm—in the fore arm before the upper arm? This is accounted for by Mr. Mayo according to the received opinions of physiologists, namely, that is owing to a diminution of the nervous fluid or stimulus sent to the limb, and which, therefore, although sufficient to set the upper part of the limb in action, is not capable of affecting the lower part.

The fifth and last question put by the author of this paper was as follows:—

How is it to be accounted for that muscular palsy is more frequent than anaesthesia? The answer is simple: the sentient nerves require a stronger influence to paralyse than do the motor, and at the same time recover more speedily from its action. Mr. Mayo further remarked, that as the office of the sentient nerve was to transmit its impressions to the brain, and not to receive them from it, it would be much less susceptible to be affected by any influence proceeding from it.

The paper concluded with some remarks on the medulla oblongata, in which, or, rather, in that part where the fifth, seventh, and eighth nerves arise, Mr. Mayo considers the vital powers to reside; at least an injury inflicted upon it instantaneously destroys life.

In the course of the evening, Dr. Tattersall presented to the College Mr. Curtis's map and chart of the ear, being, as far as we were able to learn, the only present of the evening.

LONDON MEDICAL SOCIETY.

Monday, April 6th, 1835.

DR. WHITING, President, in the Chair.

Ovarian Dropsy.

The discussion this evening involved the question of the propriety of injecting the cyst in ovarian dropsy, with the view of effecting adhesion between its parietes. A case had been narrated on the previous evening where this plan had been had recourse to, but unsuccessfully, the failure being attributed by the operator to the long continuance of the disease, and the exhausted condition of the sufferer. The plan was recommended on the grounds of a supposed analogy with hydrocele, the speaker not reflecting that in the latter complaint the fluid is contained in a distinct sac, separate from the organ, and not

of anything like the extent of the cyst in hydrops ovarii; in this latter case, the fluid is contained in the organ itself, a body also which differs very much in structure from the testis, and there is consequently no analogy; besides that, the locality of the two is so very different, that it must, even at a *primâ facie* view of the case, mark a great variance as to the degree of danger each case would be attended with. The proposition was met by the following reasoning:—the principle is that of producing inflammation, and thus causing adhesion of the cystic parietes; the operation of tapping has of itself, without the injection, induced inflammation of the sac, but, instead of curing the patient, has, from the extent of surface affected, gone on to the destruction of life, and consequently any operation tending to produce such a condition of the parts would be indefensible. Moreover, hydrocele is not removed by causing adhesion to take place between the tunica vaginalis and the tunica reflexa, but by arresting the morbid secretion, a plan of treatment which would be inapplicable in the present case. Again it was remarked, that the operation had been occasionally performed, and unsuccessfully.

In the course of the evening some discursive remarks were made upon the nature of inflammation as applicable to pathology, and other means of cure in hydrops ovarii were also alluded to. A case was partly narrated, in which the cyst had been tapped, and, by well-regulated pressure, applied by means of a bandage, a recurrence of the dropsy prevented. Allusion was made to the efficacy of iodine.

Ere the meeting adjourned, a recommendation was hazarded to extirpate the cyst, on the grounds that the lower animals were frequently spayed without any injurious consequences resulting. It was argued, that early in the disease the tumour had not contracted adhesions to the neighbouring parts, and may thus be successfully removed; but it must be recollected, that when the cyst is small, and scarcely attended with inconvenience, in which condition it may remain for years, no surgeon would be warranted in recommending an operation, nor would any patient submit to its infliction. And at a later period, when the disease adheres to the vicinal viscera, and to the abdominal parietes, no one, we think, now, after the well-known Edinburgh operation, would dare to propose it. The recommendation must therefore be—*vox et præterea nihil*.

DEATH OF SIR GEORGE TUTHILL.

It is with regret we announce the death of Sir George Leman Tuthill, which took place on the 7th inst. at his house in Cavendish-square. We understand that his demise was caused by inflammation of the Pharynx. ...

PLAGUE IN EGYPT.

ALEXANDRIA, 19th Feb.—The plague is unhappily spreading, and the number of the victims is daily greater. The government, with laudable zeal, is strictly enforcing its extraordinary measures of precaution. It may, however, be predicted with tolerable certainty that this dreadful contagion will spread still more in the course of the next month. In Cairo there have been hitherto only a few cases of plague; it is said that it has broken out in Upper Egypt also. There has not been for a long time since any case of plague on board the fleet, because it was at once put under quarantine. In a few days it will sail to Suda, there to remain till the plague shall have wholly ceased here.

[Although it is assumed in the above paragraph that the plague is contagious, our opinion on that subject is too well known to require the refutation of such an assumption.—ED.]

EFFECTS FROM CIGAR SMOKING.

MR. CURTIS, in his work on the Eye, relates the following curious case, attributed to this universal practice:—"Lieut. —, a young officer of dragoons, applied to me in consequence of a decided amaurotic affection. His sight was so imperfect, that he could not perceive small objects, even when near to him. He informed me that he had been in this state nearly three months, and that he was daily getting worse. The disease was attended with great debility and emaciation. He was, he said, unable to account for its origin; but, on further inquiry, I observed that he was in the habit of smoking cigars and tobacco to such an excess, that he had brought on a spitting almost amounting to ptyalism. He was what is called an *amateur*; and, to support his pretensions to this enviable distinction, used frequently to begin smoking soon after breakfast, and continue this pernicious custom during half the day without intermission. After this, with much persuasion, I prevailed upon him to leave off this silly modern *accomplishment*, though I had great difficulty in persuading him that this was the true cause of the disease. He however did abandon it; and by so doing, and taking a little tonic medicine, his sight was perfectly restored, and his health regained."

APOTHECARIES' HALL.

It is rumoured that Mr. Warburton's forthcoming Bill for the Regulation of Apothecaries enacts, that they shall not be allowed to compound medicines, but, being regarded as minor physicians, shall charge 10s. for each visit, or 5s. if so agreed. Chemists, alone, to be allowed to compound prescriptions, but to undergo, in the first instance, an examination with respect to their competence.

THE

London Medical and Surgical Journal.

Saturday, April 11, 1835.

THE LONDON UNIVERSITY AND ITS
PROSPECT OF A CHARTER.

WE had intended in our last number to make a few observations on the prospect which the new London University had before it of obtaining the charter for which it has so long contended, and only delayed noticing it then in the hope that we might be able, by waiting a little, to communicate something more decisive and satisfactory to our readers than it is our lot now to be able to do. We believe we need not remind our readers that our principles are adverse to monopoly in whatever shape it may appear, and friendly to all that can advance science, more particularly medical science. With these feelings we had hoped that the granting a charter, at the same time useful to the community and advantageous to this University, would ere this have been a matter of certainty. As, however, the state of its expectations do not now seem very bright, and the cold answer which the King has been pleased to return to the address, from a House of Commons which voted it with a majority of above 100, does not warrant any very sanguine hopes that, under the present Ministry, an appropriate charter will be conferred,—we proceed to say a few words on the subject.

After a hard and dubious battle, then, it appears that the New London University is *still* in doubt whether it shall obtain, at least for some time to come, a charter of even a modified description,—one empowering it to grant academic honours and the initiative degrees of “A. B.” and

“A. M.” Now, as these would confer no peculiar privileges, and only exhibit that a certain curriculum of education had been accomplished by the bearer, and with certain degrees of success, there could be no sufficient objection, we conceive, to this University possessing the power to grant them. It does not ask to confer degrees in divinity, law, or physic, and so far has consulted common sense and the public good,—common sense inasmuch as it would not be wise to permit the preceptor to be the final judge of his pupil’s acquirements; public good, because an odious monopoly would be avoided.

Had the tenor of the charter prayed for gone so far as to authorise giving degrees in divinity, law, and physic, there can be no doubt that the address, now so unsatisfactorily answered by the King, would not have been voted, as Mr. Warburton and a strong party in the House were opposed to such an extent of privilege, upon the ground that so much power concentrated in one focus would have attracted within its circle an undue share of patronage, and militated against the interests of other, and quite as effective, schools in the metropolis. Had such power been sought, a strong opposition would have been excited, and the eventful history of the charter in 1831 been in all probability repeated. That there has been no occasion for such a course in the present instance, and that moderate views have taken the place of more grasping and more ambitious ones, we think a subject for congratulation; as we believe there is ample room in this enlightened and populous country, not only for the London but half a dozen similar Universities. Taking this view of the matter we should say, whenever the desired charter is bestowed upon the College in Gower-street it should not be exclusively

conceded to it, but a similar one granted to King's College, and if perchance a third establishment should arise in the eastern districts of London, *that* likewise should be endowed with like privileges.

The times are now gone, we trust, when degrees in arts, and the advantages of academic honours, are to be enjoyed by an exclusive few, viz. the members of the Church of England at the Universities of Oxford and Cambridge. Toleration, which has marched on with a steady step in all else, has paused here. The moment is arrived when it must tread on the obstacles which have hitherto impeded its onward course. The portals of other sources of doctrinal honours must be opened wide, since the sister Universities have willed their narrow wicket impassable to any but one sect.

The mode in which the Universities in question, when chartered, may become highly beneficial to the medical profession is this:—The College of Physicians demands, under its existing regulations, a certain period of residence at a University prior to allowing an examination for their licence, and this residence may be at any recognised University, either at home or foreign. As there is no University recognised as such at the present period in London, the penalty—often a grievous one—of going at a great expense to Oxford, Cambridge, or other distant parts, possessing such seats of education, is imposed on all who intend entering this College. Under the new aspect this desideratum would be supplied, as it ought to have been long ago at the metropolitan head; and, since it is all but certain that the new laws to regulate the medical profession will only require a degree in arts, together with a sufficient curriculum of professional study obtained at *any* school in order to be eligible for examination,

the aspirant for a medical degree may fulfil his intentions without quitting the metropolis. How far it might be advisable that the new University or Universities should be compellable to examine for, and confer their degrees upon, such as have not studied at them might be a question; for it is well known that there are many fully capable and desirous of undergoing the necessary examinations, and to whom the clog of a two or three additional years' attendance, and learning over again what they are already masters of, would be intolerably burthensome, both as regards time and expense. The most liberal policy would appear to be, that the new establishment, having the power of granting the before-mentioned degrees, should do so in every instance where the candidate is able to pass the required examination, without reference to the place or mode of obtaining his knowledge,—solely on the basis of merit and acquirements.

We are aware that some jealousy about the term of Bachelor or Master of Arts has been exhibited in certain quarters, upon the ground that some confusion might ensue, and those long-monopolised titles become depreciated in consequence of the uncertainty of the public as to the source whence they were derived; but if the quantum of education necessary to obtain these degrees be regulated in the new Universities by the standard of those of Oxford and Cambridge, the objection, such as it is, falls to the ground, since the amount of knowledge ought to be alone the just criterion. The antiquated step-dames of science then could not be disparaged by the assumption of the same names for the same things. Of one thing they may feel assured, that, ratiocinate and oppose as they please, to such a complexion affairs will come at last.

As the charter will not empower the new University to grant diplomas or licences to practise medicine, we believe it is intended to form a distinct board, competent to examine in all branches of science requisite for obtaining them. This will render the pupil far more independent of his teachers than he now is. The mode in which the members of this board are to be selected has not transpired, but at all events, when constituted, it will be a remedy for many existing abuses in the examining department.

In fine, we could wish that the University, which we have no doubt will soon obtain a charter, had shown itself a little more forward as a scientific institution. Hitherto its march has been awfully slow; and, although it has possessed and possesses many eminent professors in the various walks of science, their efforts have not been able to raise it into any great degree of note: obscurity clings to it. There is space enough and ample building, and we earnestly hope that its future progress may vindicate to itself a brighter fame.

BREACH OF CONFIDENCE IN A PHYSICIAN—CRIM. CON. OF A PHYSICIAN WITH HIS PATIENT.

ALTHOUGH no admirers of hanging out, for the scrutiny of the public or our readers, the failings or even delinquencies of such of our profession as step aside from the path of rectitude and honour, we find ourselves constrained this week to notice a breach of confidence committed by one practising in the highest branch of medicine. The party in question, Dr. Webster, of Shrewsbury, has thought proper, instead of exhibiting to his subordinate brethren a high moral example, to violate that confidence which should ever subsist between the patient

and medical attendant. The case against Dr. W., we are happy to say, is one of no common occurrence in the medical world, and involves more than ordinary culpability,—it is the seduction of his patient, the wife of one who placed in him unbounded trust. The facts are,—the plaintiff, Mr. Wilton, is a respectable mercer and draper carrying on business in the town of Shrewsbury; having formed an attachment to Miss Eliza Hughes, then twenty years of age, he was married to her in 1825, being then himself twenty-nine years old. She was a young lady of personal attractions and some accomplishments. They had three children, one of whom only survives. For several years the plaintiff and his wife lived in happiness together, until they became acquainted with the defendant, who is a physician residing in Shrewsbury, where he has practised during the last nine years. Having been called in to see one of the plaintiff's children in the year 1833, Mrs. Wilton also became his patient. Dr. W. recommended the husband to remove her into the country for the benefit of her health, which was done, and the Doctor still continued to visit her. The plaintiff himself became unwell, and was recommended by the defendant to go on a *tour to the Highlands of Scotland*; and it was during this absence of the confiding husband that it is supposed Dr. W. succeeded in corrupting and obtaining possession of plaintiff's wife. When the latter returned he was received with apparent affection; and Dr. W., wishing to link himself more closely with his victim, proposed taking lodgings in plaintiff's house. Some reports, however, had gone abroad relative to his conduct; but, to disarm all suspicions, Dr. W. went himself to the plaintiff and stated them, denying their truth. Subsequently he lodged

and boarded in the same house with his victim and her husband, thus enjoying ample opportunity to pursue the career he had begun. Mrs. Wilton fell into a confirmed state of illness; she had no organic disease, but was in a state of great debility, and soon after died. Whether the sense of her guilt, and anguish of mind contributed to bring her to her grave, cannot now be known, but for fourteen months, from August, 1833, to last December, she lingered in this state. Her husband attended her with affection and care. On the 4th December her brother came to see her, and on the morning of the 5th she disclosed her guilt to her husband, who had been lying at her bedside during the night,—her brother was also present during this disclosure. Dr. Webster was sent for and came. Mrs. Wilton addressed him, her words were “Dr. Webster, I have told George that the reports against us were true.” The Doctor answered, “Mrs. Wilton, I will make you any sacrifice,” and quitted the room. Soon after she died. The evidence on this trial fully bore out the case, and the Jury awarded 500*l.* damages against the performer of this anti-professional piece of duplicity. We have laid these facts before our readers because we consider that the respectability and the moral character of the profession are injured materially by such conduct, on the part of one of its members, and that the castigation of publicity should, in such cases, ever accompany the award of pecuniary damages, however great.

COLLEGE OF PHYSICIANS.

THE papers, read at the College of Physicians at the last meeting, were *two*,—one short paper on apoplexy by Dr. Watson, and another by Mr. Mayo “On

the Origin of Palsy as a Consequence of Disease or Lesion of the Brain.” The author adduced arguments to show that palsy occurred not from an interruption of the ordinary supply of nervous energy, but from a depressing influence communicated by the diseased brain to the nerves. He inducted from this, that palsy is not to be always treated by depletion, it being a disease of depression. Now and then instances might arise indicating depletion, but the palsy would not be directly benefited thereby, and if this plan was injudiciously used it might prove fatal. The meeting was very fully attended.

British Hospital Reports.

GUY'S HOSPITAL.

Ossification and Ulceration of the Cartilages of the Larynx, with Fistulous Opening.—George Blackgrove, æt. 48. During the former part of his life he was employed in some iron-mills, and was accustomed to drink spirits freely; but his habits lately have been temperate. He received a severe burn on the head five years ago, which healed very slowly (in 12 months), and reduced him considerably. After that, his occupation was changed, and he worked in a tan-yard, where he was much exposed to damp and cold: the early consequence was an abscess, which formed behind the left ear, and proved as troublesome as the burn. After having been a patient at several public institutions, he was at length cured in 15 months. For the last four or five weeks his health has not been so good as usual; and fourteen days ago he had a small swelling, attended with pain, on the left side of the larynx, followed successively by two on the opposite side: they all burst, and discharged much. Four days before his admission he noticed a hissing sound proceeding from the ulcer on the left side, and he coughed almost incessantly for about two days; at last he applied for relief at the hospital as an out-patient. He was admitted to the house the following day, Jan. 3rd; and, on examination, a large portion of the cricoid cartilage on the left side, and of the thyroid on the right, was found ossified and denuded. There was a fistulous opening through the crico-thyroid membrane, through which air passed very freely while speaking, and generally without giving pain. He states, that six months ago he strained himself while carrying a heavy weight, and that his throat has always been uneasy since.

Local applications, and those of a very mild nature only, were applied for several days. On the 7th January Mr. Key ordered him—

Iodinæ, gr. ss.; potass. hydriod., gr. iij.; syrup. papav., ʒss.

10th. His appetite, which was deficient when he was admitted, is increased; the ulcers somewhat improved, appearing less inclined to extend.—Pergat.

12th. Mr. Key attempted to remove a portion of the cricoid cartilage, but found it firm.

16th. His health and appearance are both much better; he requested a more plentiful diet, which was allowed him. A small portion of the cricoid cartilage was removed.

20th. He was ordered, as a gentle stimulant, a lotion of very dilute nitric acid (gtt. ij. ad ʒj. aq.); but, by mistake, he applied some pure acid, which was in the ward. This destroyed the integuments to some extent, but does not appear to have affected the cartilage.

21st. The ulcer is much inflamed. No ill effects followed the application of the acid, except the extension of the ulcerating surface. Bread poultices were applied, and the iodine continued.

23rd. His throat is much better; the cartilage appears quite firm, and the ulcers on the right side cicatrising.

28th. The smaller ulcer on the right side healed. One bare spot of cartilage can be felt by the probe, in the larger one on the same side. The opening in the larynx on the left side smaller.—Pergat.

The opening was closed on the 12th Feb. and he left the hospital quite well about three weeks afterwards. He suffered no inconvenience from the iodine.

WESTMINSTER HOSPITAL.

External Application of the Iodine.

CASE I.—*Inflamed Bursa on the Knee.*—Elizabeth Vanderbrost, ætat. 26, a servant, was admitted into Anne's Ward, October 15th, 1833, under Mr. Guthrie. Is a servant, employed in the kitchen, but not as housemaid; says she has not been accustomed to do work on her knees, but latterly has been so engaged. Complains of stiffness of the right knee, and considerable pain, with difficulty of walking; on examination an elastic tumour on the anterior aspect of the joint, a little above the insertion of the ligamentum patellæ, presented itself; it was of an oval shape, and showed evident fluctuation; the integuments were undischoloured, nor was there any external inflammation apparent; health unaffected.—Ordered to remain quiet in bed, and have the tinct. iodinæ applied.

17th. The disease is much the same as at last report; complains of the pain caused by the application of the iodine; ordered to have it repeated daily, and a poultice at night.

19th. The tumour is lessened in size, and she says that when the pain from the iodine has ceased, she finds that that which she had previously experienced in the knee is materially lessened.

23rd. The original pain has entirely disappeared, and the bursa is not one-half the size it was. The iodine is now to be applied twice a day.

Nov. 9th. The knee has gradually but slowly improved since the last report, but it now appears to be stationary; her chief complaint is weakness in the joint. Ordered the ung. hydrarg. fort. c. camphorâ spread on lint to be applied over the whole knee, and secured by strapping, encasing the joint with pasteboard splints on each side of the joint, and in the ham, made to adapt themselves to the shape of the parts by being previously soaked in warm water, and kept *in situ* by a bandage. By these means the joint was kept immoveable.

This apparatus was kept on for a week, and then removed, no other advantage being derived from its use than might be obtained by keeping the limb steady. The pasteboard splints and roller only were re-applied.

She was dismissed on the 7th of December, cured.

During the past year, many cases of enlarged bursæ have been admitted into the hospital, and treated by the external application of the tincture of iodine, and with success. The iodine used in this manner proves a powerful stimulant and rubefacient, and, in some cases, a vesicatory. It should be applied with a feather every day, until the skin assumes a deep-red colour; a poultice at night will remove the epidermis, and the next day the iodine should be re-applied.

CASE II.—*Syphilitic Enlargement of the Tibia.*—Elizabeth Bonney, ætat. 33, residing in Smith's Rents, was admitted into Anne's Ward, September 24th, 1833, under Mr. White. Atrabilious temperament; tall, thin, and rather pale; has been married ten years, but has not had any children; had one miscarriage; three years and a half ago her husband gave her the venereal disease, does not know what symptoms he had; did not have either sores or buboes herself, nor has she had any inflammation of the eyes or sore throat; has had leucorrhœa for the last fourteen months. She has had a venereal, copper-coloured eruption on her skin, according to her own account, which appeared over the whole body, and continued on her a month; she took sulphur and the super-tartrate of potass in treacle for it, and applied simple ointment on the spots. Within the last twelvemonths, pains in the shin-bones and arms, increased in severity at night time, have come on, and are very severe; has had her mouth made tender, but, when it had proceeded so far, she left off the mercury, never

carrying its effects to actual salivation. For the last year, she has been very irregular, scarcely seeing any thing, and sometimes missing whole periods. Has been an out-patient of the physicians of the hospital for some time past; under the treatment then adopted she improved so much that she gave up her letter; the disease has since suffered a relapse.

The left shin-bone, about its centre, is considerably enlarged and irregular, or rather the enlargement gradually rises from the upper part of the tibia to the centre, where it is the greatest, and then as gradually diminishes; the pain she suffers at night she describes as being so great as in a great measure to prevent her sleeping.

R. Decoct. sarsæ. Oj.,
Hydrarg. oxy-mur. gr. $\frac{1}{4}$.—Solve.
Capiat dimidium bis in die.

The tincture of iodine to be applied externally over the enlarged tibia.

28th. Has had an occasional anodyne, by which she rests better than she did. Mr. White saw her to-day, and desired the oxymuriate to be omitted, as he was anxious to try the effect of the iodine on the diseased bone without mercury.—To continue the sarsaparilla.

Oct. 1st. Has hitherto had only one anodyne, and she says the pain in the limb is much diminished.

3rd. The iodine has caused great pain and vesications; ordered to be omitted.

5th. The iodine is again applied; thinks the irregularity of the bone is lessened.

10th. Has had some slight irritation of the system, with sore-throat and headach, for which she was ordered cathartic pills and diaphoretic mixture; she is now much improved.

13th. The febrile excitement has nearly subsided, but the irregularity of the tibia appears to be greater.—Reapply the iodine.

22nd. The enlargement is evidently lessened. She was made an out-patient, and directed to attend every other day, which she neglected to do, coming only occasionally, consequently the enlargement increased.

CASE III.—*Enlargement of the Leg, resembling Elephantiasis.*—Elizabeth Cross, æt. 24, was admitted July 30th, 1833, under Mr. White, into Anne's Ward. Is a short, stout woman, sanguineous temperament, of very irregular habits. The right leg has been enlarged to a greater or less extent for the last three years; has been in this hospital twice before for the same complaint, and has hitherto received but little benefit; the whole of the leg and foot, stopping just below the knee, are equally enlarged to rather more than double their natural size; the whole of the limb firmer and harder than usual, the integuments undiscoloured, and apparently clear from any disease. The sudden arrest of

the enlargement just below the knee is sufficiently remarkable; the little toe of that foot has been ulcerated for several months, and, although it appears to have healed, it is still exceedingly painful; the tumefied leg pits upon pressure, the pit remaining for some time after. It does not give her any pain, but she finds it a great inconvenience. The left leg is sound.

She attributes the supervention of this disease to erysipelas; previous to the first attack (and she has had three), the leg was of the same size and shape as the other, and the limb gradually enlarged after each.

Sept. 17th. Several remedies have been tried to reduce the size of the limb, but hitherto ineffectually, more particularly the pustulation by the ung. ant. tart. and bandaging. Mr. White to-day ordered pressure to be excited by the medium of Mr. Younge's plaster, spread on calico, then cut into slips, and applied equally over the limb.

R. Emp. saponis, emp. thuris, partes equales, resinæ flavæ paucillum.—
M. fiat emplastrum.

18th. Complains that the bandage is too tight, and that it has induced great pain.—Let it be loosened.

21st. The whole of the plaster removed, and the leg found to be in a state of severe inflammation; not to be reapplied. Mr. W. ordered her to use exercise, but afterwards directed the external application of the tincture of iodine, with a feather, over the limb.

Oct. 3rd. The iodine is so freely applied as to give a deep colour to the limb; it appears to have reduced the limb somewhat in size; she is sick, and complains of headach, with constipated bowels.—To give up iodine for the present, and take aperient medicine.

12th. Let the iodine be reapplied.

Nov. 2nd. Is much improved; the limb is certainly smaller and softer; let the iodine be reapplied daily.

Dec. 3rd. The limb is now about a third smaller than when she commenced with the iodine; it has been applied almost daily since the last report, but so slightly at times as to produce but little effect. She has remained in the hospital considerably beyond the time patients are allowed to stay in by the laws of the institution (to wit, two months), and is now dismissed.

This patient was readmitted into the hospital soon after the new establishment was opened; the disease was then as bad as ever; it was treated by punctures, and after a certain time an incision was made into it. Some benefit was derived, but she again left the hospital ere a complete cure could be (if it were possible) effected, and her complaint returned afterwards to its full extent. She is of very intemperate habits.

CASE IV.—*Anomalous subcutaneous Tumour—Varicose Veins.*—Charlotte Vincent,

æ. 27, tall and thin, of the nervo-sanguineous temperament, with features approximating to those of the gipsy-tribe, was admitted under Mr. Guthrie, June 11th, 1833. Is not married, nor has she borne children. Came in for a tumour situated on the inside of the left leg, just below the knee, smooth and flat, about the size of the palm of the hand; oval in shape; moveable in every direction except at the upper and inner part, where it appears to dip down into the ham, and to be there lost. The tumour is very firm, having few depressions on its surface; the skin covering it is of a darker hue than elsewhere. She considers that this tumour has not existed more than a week, although she can call to mind that a small knot, as she terms it, has been in that situation for years. The saphena vein can be traced up the inside of the leg, completely varicose; it appears to anastomose very freely, in a congeries of veins in a similar condition, over the surface of the tumour, and to pass a little way up the thigh in the same unhealthy state; the skin over the vein is discoloured. This varicose condition of the vein has existed some time in the left leg; the right is unaffected. She complains of sharp darting pain in the tumour; her health is out of order. The disease was at first mistaken for an abscess, and poulticed accordingly.

21st. Mr. Guthrie saw her, and ordered the surface of the tumour to be well blistered by the external application of the tincture of iodine, with a poultice at night to detach the epidermis.

It was applied two or three times in the course of the day, and by the next the skin had assumed a dark-red colour, and was covered with small vesications; the application did not cause much pain. By the 25th considerable vesication had formed, and the use of the iodine was accordingly intermitted; the tumour appeared to be rather smaller, and the varicose veins were less apparent. By the end of the month, the enlargement of the veins had entirely disappeared, and the tumour was lessened in size, and not so much elevated above the surrounding parts. She had, in the interim, suffered from an attack of corneitis in the left eye, caused by her applying her finger to the eye when it was wet with the tincture of iodine. This was soon cured by the stimulant treatment. In the course of the next month, considerable diminution took place, but in August little progress was made. She began to get tired of the tincture, and did not apply it with the same care as heretofore; the disease, however, yielded to the treatment which has been detailed, and, on the 3rd of September, she left the hospital freed from all vestiges of her tumour and varicose veins.

CASE V. — *Hydrocele — Considerable Chronic Tumefaction after the Operation — Use of Iodine.*—James Knight, ætat. 55, a countryman, from Curricots, Herts, was ad-

mitted under Mr. Guthrie, March 19, 1833, into John's Ward. Is a tall, stout, hale-looking man, of a very powerful build; sanguineous temperament; has no other ailment than extreme deafness, with the exception of that for which he was admitted; has hydrocele in each tunica vaginalis; that of the right side being considerably the larger. The affection commenced about three years ago, the swelling beginning at the bottom of the scrotum, and gradually increasing in size; the right tumour has made rapid progress of late. Poised on the hand, the tumours give the sensation of a very weighty body, are elastic, smooth, and transparent, and so large, that the penis appears buried between them, and the testicles cannot be felt. The length of the right hydrocele was ten inches and four tenths; its circumference, from the raphe anteriorly to the raphe posteriorly, ten inches and nine-tenths; length of the left, six inches and nine-tenths; circumference, seven inches and two-tenths.

Mr. Guthrie, considering the right hydrocele far too large to inject, on account of the immense surface which would inflame, and the dangerous consequences which might ensue, determined to puncture it, and draw off its contents, and when it had acquired a moderate size, to perform the operation for the radical cure. About two pints of a clear, straw-coloured fluid were drawn off, and the patient sent to bed; slight inflammation came on, but was speedily subdued.

On the sixth of April, the tumour on the right side being as large as the left, both were punctured, and five ounces of fluid drawn off from each. Rather a larger quantity of common water was then injected, and kept in while two hundred were counted. He was afterwards sent to bed, and directions given that if pain did not come on, he should be made to walk briskly about until it did. For this there was no occasion; a sharp attack of inflammation ensued, requiring the repeated application of leeches and cold lotions, with purgatives, &c., to subdue it, and leaving behind an enlarged state of the testes themselves apparently.

About the beginning of May he was directed to rub in a drachm of blue ointment daily, to excite absorption, which plan was continued throughout the month, without advantage. In June, therefore, the external application of the tincture of iodine was had recourse to, and applied so freely and so often as to cause considerable inflammation and tumefaction, with burning heat and pain, so much so, that although, when these symptoms were removed, the testes were evidently much lessened, the man dreaded the iodine so much, that he would not consent to its re-application. The blue ointment was therefore continued throughout the month, and he was discharged in July, nearly well.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, April 2, 1835:—Alfred Lord, Northiam, Sussex; James Frederick Gilby Wright, London; Nicholas Grant, Leeds; John Watkins, London; Edward Burnham, Grimsby; John Adams Sherwell, Ivy Bridge, Devon.

MISCELLANY OF FACTS.

We understand that Mr. Alexander will not operate on his Royal Highness the Duke of Sussex, but that the eminent surgeon and oculist, Mr. Guthrie, has been engaged for that purpose.

Mr. Osborne, late assistant surgeon to the Thunderer, has returned to this country from the West Indies invalided.

Considerable progress has been made by the Committee appointed to obtain contributions for erecting the "South Devon and West Cornwall Hospital." There have been contributed about 2,500*l.* for this object, and as soon as 1,000*l.* more have been collected the building will be commenced. Amongst the larger benefactions we find Lord Valletort, 200*l.*; Lady Valletort, 50*l.*; Dr. Younge and Mr. Gill, 100*l.* each; Sir J. B. Y. Buller, Bart., M.P., T. Bewes, Esq., M.P., P. Schow, Esq., Mrs. Bint, Mrs. Hodson, R. Bayly, Esq., Earl St. Germain's, Earl Morley, E. P. Bastard, Esq., and the late Mrs. Fox, 50*l.* each.

APPOINTMENTS.

Naval.—Mr. Edward Newman, assistant-surgeon to the Lapwing. Mr. James Taylor, assistant-surgeon to the Tartarus. P. Aldrich, assistant-surgeon, Convict Establishment, Chatham.

Military.—Surgeon John Shutt, M.D., from the 79th Foot, has been appointed surgeon of the 21st regt., vice William Byrnt, who retires upon half-pay. Staff Assistant Surgeon Wm. Dawson, M.D., to be surgeon of the 50th regt., vice Wm. Maikham, who also retires upon half-pay. Assistant-Surgeon John Lorimer, M.D., from the 24th regt., to be surgeon of the 79th Foot, vice Shutt, appointed to the 21st. Assistant-Surgeon John Donald Grant, from the 95th Foot, to be assistant-surgeon of the 82nd Foot, vice Shanks, promoted in the 55th. J. Mellis, M.D., has been appointed assistant-surgeon to the forces, vice Drummond, appointed to the 14th Foot. J. C. Cameron, M.D., also assistant-surgeon to the forces; and Messrs. W. Hamilton and C. Cowen have obtained similar appointments.

General.—Dr. Robert Dyce, physician to Robt. Gordon's Hospital, Aberdeen, in the place of his late father. Dr. Aston and Dr. Ronayne, superintendents of two new dispensaries just opened in Castlebar, Ireland. Mr. Thomas Goyna, of Leicester-square, surgeon to the parish of St. Martin's in the Fields. Mr. T. Sullivan, surgeon, superintendent to the government emigration ship Canton, for New South Wales. Dr. James Clark, physician in ordinary to the Duchess of Kent, in the place of the late Dr. Maton.

Great mortality has taken place on board the convict ship off Woolwich; not less than four inquests have been held in one day this week before C. J. Carttar, Esq., coroner, upon the bodies of convicts who have died on board the *Justitia*. The verdict in each case was that "death ensued from natural causes."—*Kent Herald*.

Phrenological Society.—Dr. Elliotson, F.R.S., in the Chair.—A gentleman, in the absence of any paper being read, got up and expatiated upon the peculiar craniological developments in paupers—not adventitious paupers, but such as are habitually so. He instanced that one gentleman, a friend of his and no mean phrenologist, who had obtained the situation of assistant commissioner of poor laws, had plouted out in many cases the

inclinations of paupers submitted to his inspection, and thence detected their secret habits, and done much good.

Resignations.—Mr. Heath, senior resident-house-surgeon to the Birmingham Dispensary. Dr. Gilliland, superintendent of the Rutland Dispensary, County Donegal.

DEATHS.

Sir George Leman Tuthill, Knt., M.D., of Cavendish-square. At Chester, Mr. Edward Owen Snow, surgeon, formerly of Beaumaris. Mr. A. D. Wilson, surgeon, R.N., at the Royal Naval Hospital, Stonehouse. Mr. Henry Currey Cape, of Low Ireby, Cumberland, surgeon. Mr. Archibald MacRae, surgeon, of Buccleugh-place, Edinburgh. Dr. William Dyce, F.R.S., and physician to Gordon's Hospital, Aberdeen. Dr. W. J. Field, Booterstown, near Dublin, of malignant typhus fever, caught in his attendance on the poor. Mr. Robert Burnett, of Rothbury, surgeon.

WEEKLY BILL OF MORTALITY.

London, Tuesday, April 7th, 1835.			
Abscess	2	Hooping-Cough	19
Age and Debility	57	Inflamation	47
Apoplexy	8	Inflamation of the	
Asthma	23	Lungs and Pleura	1
Cancer	3	Insanity	11
Childbirth	8	Jaundice	1
Consumption	85	Liver, Diseased	7
Convulsions	47	Measles	17
Croup	5	Miscarriage	12
Dentition, or Teeth-		Mortification	1
ing	5	Paralysis	1
Dropsy	24	Rheumatism	1
Dropsy on the Brain	21	Scrofula	1
Dropsy on the Chest	4	Small Pox	17
Erysipelas	1	Sore Throat & Quinsey	1
Fever	7	Thrush	2
Fever, Scarlet	13	Unknown Causes	8
Fever, Typhus	2		
Gout	2	Stillborn	31

Buried, Males 257 Females 213 Total 500
Increase in Burials reported this week, 56.

BOOKS RECEIVED.

The Constitution of Man, considered in relation to External Objects. By GEORGE COMBE. *Handerson Edition*. 1835.

Principles of the Treatment of Gout, with a further Examination of the Effects of Colchicum as a Remedy, and some Observations on the Use of Veratrin in that Disease. By SIR CHAS. SCUDAMORE, M.D., F.R.S., &c. Longman. 1835.

The Oration delivered before the Medical Society of London at their sixty-second Anniversary, 1835. By WALTER C. DENDY, M.R.C.S., &c. Clowes.

CORRESPONDENTS.

From our Paris Correspondent.—Typhus fever, which for some time past has been raging in Paris, has within the last week greatly increased. Several cases have been admitted into the *Hôtel Dieu* under M. Chomel. The medical students have not escaped, some have died, and many are lying in a very dangerous state.

Well-Wisher.—His communication shall receive due consideration.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At the Meath Hospital during the Session of
1834-5.*

LECTURE VII.

General remarks on the Pathology of Paralysis—Dr. Graves's new views upon this subject—Their application to the study of several varieties of Paraplegia—Explanation of Mr. Stanley's cases of Paraplegia—Of Dr. Stokes's Cases—Two Cases of Paraplegia after Enteritis—Paraplegia after Metritis—Paraplegia the consequence of Poisoning by Lead—By Arsenic—Paraplegia arising from Irritation of the Urethra (Case communicated by Dr. Hutton).

GENTLEMEN,—Having recently met with some very interesting and remarkable cases of impairment of the muscular functions of the lower extremities, I am anxious to offer a few observations on paraplegia, particularly while the subject is still fresh in my mind: we can resume the consideration of our clinical cases at a future opportunity. I would entreat your favourable attention on this occasion, while I lay before you some opinions on paraplegia peculiar to myself, and differing from the views entertained by the generality of medical writers; the subject, too, is one of extreme interest, involved in much obscurity, and offering an extensive field for investigation; I trust, however, I shall be able to communicate some new matter calculated to throw much additional light on the nature of this affection, and thus contribute to fill up the blanks which exist in an important department of pathological medicine.

You are aware that by paraplegia is meant that species of paralysis in which the lower extremities are affected, a paralysis frequently embracing loss of motion and loss of sensation in the lower extremities, accompanied in many instances with derangement of the motor

power of the bladder and rectum. Now I wish you clearly to understand that it is not my intention to describe the symptoms or discuss the causes of those species of paraplegia which are well ascertained, and of which you will find satisfactory descriptions in your books; under this head may be classed all those cases which are produced by disease of the spinal marrow, its membranes, the vertebræ or their appendages, their ligaments, and diseases directly affecting the great nerves which supply the lower extremities. All these matters have been sufficiently studied, and require no additional observations from me; my object is to elucidate some of the obscurer varieties of paraplegia. I have touched on this topic before in my lectures delivered at the Meath Hospital, but since that time I have met with many cases and made inquiries which tend to throw additional light on the subject. I have read with the attention which it merits a lecture on this subject, published by my colleague, Dr. Stokes, in Renshaw's *London Medical and Surgical Journal*, and also Mr. Stanley's interesting cases in the 18th vol. of the *Medico-Chirurgical Transactions*, published in the year 1833. In Mr. Stanley's paper, several cases of paraplegia are brought forward, the explanation of which had not been understood before or even at the time he wrote, but which I had given several months previously, as applied to paralysis in general, in two lectures in the 58th and 59th numbers of the *London Medical and Surgical Journal*, and which had been delivered at the Meath Hospital, in Nov., 1832, and were published immediately afterwards. In fact, the explanation offered by Mr. Stanley is merely a corollary of the propositions which I laid down at that time, and which I shall beg leave to repeat here.

Before I commenced my investigations on the subject, pathologists, in endeavouring to ascertain the causes of paralysis, sought for the sources of the disease almost solely in the centres of the nervous system. They looked for the causes of paralysis in the brain or spinal cord, where they supposed it originated either in organic or functional derangement of these important organs. In the lectures to

which I have already referred, I showed that this mode of accounting for all forms of paralysis, by referring them to original disease of the nervous centres, was in many instances incorrect, and proved, I think to the satisfaction of the class and those who read the lectures, that a most important and influential cause of paralysis had been hitherto nearly overlooked, a cause which, commencing its operation on the extremities, and not on the centres of the nervous system, might, by a reflex action, produce very remarkable effects on distant parts. I brought forward on that occasion many arguments, facts, and cases, to prove the possibility of such an occurrence, to show that it frequently happens that impressions made on the extremities of the nerves will generate a morbid action in them, that this morbid action will be conveyed along their branches and trunks to the spinal cord or brain, and that, continuing its propagation, it may, by a retrograde course, be carried thence along the nerves to distant organs, and in this way give rise to disease in parts originally intact and healthy. I brought forward several instances to prove that when a certain portion of the extreme branches of the nervous tree has suffered an injury, the lesion is not confined merely to the part injured, but in many instances is propagated back towards the nervous centres, and that in this way not only the nervous filaments of the injured part may be affected, but also the main trunk of the nerve and other branches; or that the lesion may reach the brain or spinal cord, and thus produce still more extensive effects on the system. What I endeavoured to impress upon the class at that time was, that pain, numbness, spasm, and loss of the power of muscular motion, may be produced by causes acting on the extremities of the nerves, and that such affections commencing in the extremities of the nerves may be propagated towards their centres so as to be finally confounded with diseases originating in the centres themselves. For a detailed account of my views on this subject I beg leave to refer to the published lectures; at present I shall content myself with recapitulating a few of the facts on which these views were grounded.

If you place your hand in snow or ice-cold water, you will find that it is not merely the parts subjected to the influence of cold that become numb, and that the diminution of power is not entirely limited to the muscles concerned in the peculiar motions of the fingers, but extends also to those of the fore-arm, by which the principal motions of the hand are performed. Here the impression of cold is found to affect not only the parts immediately exposed to it, but also parts that are quite removed from its influence and warmly covered. We see that not only the muscles attached to the fingers, but also those of the fore-arm, undergo from this cause a temporary paralysis. Now, if a

cause of a trifling nature, and acting only for a time, can, when applied to a part, produce loss of power in another and more central part, we may infer that the same cause acting permanently might produce permanent paralysis of the latter. We can therefore conceive how in this case the agency of cold might travel upwards and reach the muscles of the arm also, and thus we should have a change, commencing in the tips of the fingers, propagated to parts at a considerable distance from the situation of the original lesion. Again, we find that an injury affecting one branch of a nerve will be propagated by a retrograde action so as to affect another and distinct branch, as was exemplified in a case mentioned in my former lectures on paralysis. A young lady, having wounded the inside of her ring finger with a blunt needle, observed that she had, in consequence of the injury, a considerable degree of numbness, not only in the wounded finger, but also in the little finger next to it. Here we find that an impression made on the nerve of one finger not only affects that finger, but also travels backwards so as to operate on the branch given off by the ulnar nerve to supply the little finger, and given off, observe, above the place of the wound, so that the phenomena were identical with those which would arise from an injury inflicted on the branch which supplied both fingers. Within this last month, I have had an opportunity of witnessing a very striking fact of this nature. A young gentleman, distinguished for the extent of his classical and mathematical acquirements, and who had just succeeded in obtaining the senior wranglership, swallowed a small but angular piece of chicken-bone. It lodged low down in the œsophagus, and was not pushed, by means of a probang, into the stomach until after the lapse of more than an hour. Considerable inflammation of the pharynx, œsophagus, and surrounding tissues, was the consequence; on the third day of his illness he got a violent, long continued, and ague-like rigor, which terminated in a profuse perspiration, and ushered in a well marked inflammation of the neck of the bladder. In the next place, we find that impressions affecting the frontal branches of the fifth nerve may, by a reflex action, operate on the retina so as to cause blindness. Here the morbid action travels from the circumference towards the centre, and is again reflected towards the circumference so as to affect a separate and distinct part. Of this I lately saw a curious and instructive example. A medical student, travelling through Wales on the outside of the mail, was exposed for many hours to a keen north-easterly wind blowing directly in his face. When he arrived at the end of his journey he found that his vision was impaired, and that every thing seemed as if he was looking through a gauze veil. There was no headache, no symptom of indigestion, to account for this evidently slight degree of amaurosis, and yet he was recommended to use cupping

to the nape of the neck and strong purgatives. When he consulted me, which he did in the course of a few days afterwards, I at once saw that there was something unusual in the case, and, after a careful examination, I at length elicited from him the fact of his having been exposed to the influence of the cold wind. It was now apparent that the retina suffered in consequence of an impression made on the facial branches of the fifth pair. The cure was effected, not by a treatment directed to relieve cerebral congestion, but by stimulation of the skin of the face, forehead, temples, &c.

It is, however, unnecessary to multiply examples to prove the truth of the proposition, that disease may commence in one portion of the nervous extremities, and be propagated towards the centre, and hence, by a reflex action, to other and distant parts. Bearing this in mind, we can explain why it is that disease commencing in one part of the system may produce morbid action in another and distinct part, and it certainly appears strange, that, with so many striking examples before them, pathologists should have so long overlooked this cause, when seeking to explain the nature of many forms of paralysis. If certain irritations of the nervous extremities in one part of the body are capable of giving rise to a derangement in the whole system of voluntary muscles; if a local affection may become the cause of exalting and rendering irregular the functions of every muscle in the body; then, surely, it is not difficult to conceive that a cause, local as the former, and tending not to exalt but to depress the motor function of the muscles, may likewise affect not merely the nerves and muscles of the part, but also those of the whole body or of distant organs, giving rise to paralysis. Now, pathologists have long recognised the fact, that general muscular excitement and spasm may arise from the operation of a local irritation. A man gets a contused wound on his thumb or one of his fingers, and some superficial nerves are injured. In the course of a few days he begins to feel a degree of stiffness about the lower jaw and muscles of the neck, accompanied by a sense of constriction about the diaphragm. This increases gradually, all the voluntary muscles are thrown into a state of fixed spasm, and he gets tetanus. Here a few trifling branches of the digital nerves are injured, the morbid action is conveyed from them along the nerves of the arm to the spinal cord and brain, and is thence, by a reflex action, propagated all over the body. A wound of the finger causes a morbid action in its nerves, and it has been acknowledged by pathologists that this, by acting on the brain and spinal cord, may give rise to a general morbid action of the muscular system. This being the case, there is nothing improbable in supposing that a cause affecting any portion of the branches of the nervous tree, and which produces effects of a paralytic nature, may likewise react backwards towards the nervous centres, and thence,

by a reflex progress, may extend its influence to distant parts of the circumference.

To give another instance: how often do we see irritation, commencing in the intestinal mucous membrane, propagated backwards towards the brain? Take the familiar example of intestinal worms. A child labours under worms;—here the irritation of the digestive mucous surface whether it be produced by the worms or by the indigestion which accompanies them, is propagated from the stomach and bowels to the brain, and thence reflected to the voluntary muscles, causing general convulsions.

Dr. William Stokes details the following case in his lectures. "A young woman was admitted into one of the surgical wards of the Meath Hospital, for some injury of a trivial nature. While in the hospital she got feverish symptoms, which were treated with purgatives consisting of calomel, jalap, and the *black bottle*, a remedy which deserves the name of coffin bottle perhaps better than the pectoral mixture so liberally dealt out in our dispensaries as a cure for all cases of pulmonary disease. She was violently purged, the symptoms of fever subsided, and she was discharged. A few days afterwards her mother applied to have her re-admitted, and she was brought in again, and placed in one of the medical wards. Her state on admission was as follows:—She had fever, pain in the head, violent contractions in the fingers, and alternate contraction and extension of the wrist and fore arm. These muscular spasms were so great, that the strongest man could scarcely control the motions of the left fore-arm. In addition to these symptoms, she had slight thirst, some diarrhœa, but no abdominal tenderness. On this occasion a double plan of treatment was pursued, the therapeutic means being directed, to the head, in consequence of the marked symptoms of local disease of the brain, and to the belly, from the circumstance of abdominal derangement observed in this and her former illness. She died shortly afterwards, with violent spasms of the head and fore-arm; and as she had presented all the ordinary symptoms of a local inflammation of the opposite side of the brain, we naturally looked there first for the seat of disease. After a careful examination, however, no perceptible trace of disease could be found in the substance of the brain, which appeared all throughout remarkably healthy. She had all the symptoms which, according to Serres and Foville, would indicate disease of the optic thalamus or posterior lobe of the opposite side, yet we could not find any lesion whatever of its substance, after the most careful examination. But on opening the abdomen we found evident marks of disease; *the lower third of the ileum, for the length of six or eight inches, was one unbroken sheet of recent ulcerations.*" This case, gentlemen, you will perceive just now, bears very strongly on the subject of paraplegia arising from enteritis.

Again; how often do we see convulsions

brought on in the same way by cutaneous irritation? A child gets an attack of fever, accompanied by general irritability and restlessness. During the course of the disease, the lungs become affected, and the medical attendant applies a large blister, which is left on for several hours. Next day the symptoms of nervous irritation become more violent; the child is perfectly restless, or, if it doses for a moment, awakes screaming, and is finally attacked with general convulsions. Many other examples could be brought to support this view of the question, and prove that morbidly increased action of the whole muscular system may be excited by a cause acting merely on some insulated portion of the nervous extremities.

I think, therefore, that I am borne out by analogies strikingly exhibited by numberless examples, in asserting that the circumference of the nervous system has been too much neglected by pathologists, in their explanations of the nature and causes of paralytic affections. I could give many instances of pains commencing in particular parts of the body, and travelling back towards the spine, so as to give rise to an affection of that organ, which has been too generally looked upon as the result of idiopathic disease. How often does this happen in hysteria? How often does it happen that the organ principally engaged in hysterical cases becomes, during the attacks, acutely painful, and that, as the disease proceeds, the pain travels back towards the spine, until at length the spinal cord itself becomes affected, and we find acute pain and tenderness over some portion of its track? I am fully persuaded that many modern authors who have ascribed the phenomena of hysteria and other affections to spinal irritation, have been too hasty and indiscriminate in their explanations. In the majority of cases you will find hysterical patients complain at first, not of pain in any part of the spinal cord, but in the right side in the situation of the liver, in the region of the heart or stomach, or in the head or the pelvic region. At this period there is seldom any tenderness over the spinal cord; but, as the disease goes on, the irritation which existed in some of those situations to which I have referred, is extended to the spine, and pain and tenderness are now felt over some of the spinous processes of the vertebræ. When this has taken place, then the spinal irritation thus produced becomes itself a new cause of disease, from which, as a centre, the morbid influence is propagated to other organs. The profession owe much to Teale, Griffin, and other writers, who have pointed out the importance of attending to this spinal tenderness in cases of hysteria, &c. Still, however, like all those who have been employed in investigating a new subject, they have perhaps generalised too hastily, and have, in many cases, regarded this spinal tenderness as a cause, where it should have been merely considered as a consequence.

Having thus endeavoured to explain some of the general principles which should guide us in the investigation of nervous diseases, I shall relate some cases of paraplegia, which, though differing in their origin as to the organ inflamed, will strike you as exhibiting a close analogy to those published by Mr. Stanley. "In November, 1832, I attended with Mr. Kirby and Mr. Cusack a young gentleman aged fourteen, who was residing at a boarding school in the vicinity of Dublin. He had eaten a large quantity of nuts on the eve of Allhallows, and had, in consequence, obstruction of the bowels, attended with sense of weight and pain of the stomach, nausea, loss of appetite, and obstinate constipation. Active purgatives, of different kinds, were employed without effect, and the obstruction was only removed by the use of repeated enemata thrown up with Read's syringe introduced as far into the cavity of the intestine as the circumstances of the case permitted. To these means, assisted by leeching and stumping, the constipation yielded; but its removal was followed by symptoms of enteric inflammation, embracing not one but all the coats of the intestine, the mucous, the muscular, and certainly the peritoneal. The occurrence of a new and violent disease greatly impeded his cure; we had a long and anxious attendance, and the young gentleman escaped with great difficulty. However, the enteric symptoms at length gave way, convalescence became manifestly established, the patient was able to sit up in his bed, and as his strength and appetite were rapidly returning, he was informed that he might get up. On attempting to leave his bed, it was found that he had lost the power of using his lower extremities—in fact, he had become paraplegic. He had perfect power over his arms and trunk, but the lower extremities were quite useless. The paralysis, however, was entirely limited to the muscles; there was no diminution of sensibility in the limbs; no numbness, pain, or sensation of formication; and the muscular functions of the bladder and rectum were, apparently, uninjured.

Before I enter on the explanation of this case, permit me to recite the following. "In the month of November last, I was called to visit a lady residing in the neighbourhood of Merrion-square, who was said to be labouring under symptoms of dyspepsia. She had a sense of weight about the stomach, nausea, tendency to vomit, epigastric and hypochondriac tenderness (the latter situated in the right side) but no fever or excitement of the circulation. In the course of two or three days she became slightly jaundiced, and it was evident that the latent cause of her disease was, in all probability, a gastro-duodenitis terminating in an affection of the liver. It is sufficient to say that this lady's symptoms went on, and that the diseased action gradually extended to the whole intestinal tube, liver, and peritoneum. Her bowels became tympanitic, her

belly extremely tender on pressure, she got low fever, with quick pulse and great restlessness, and was saved with difficulty by the repeated application of leeches, and the use of calomel so as to affect the mouth. She became convalescent, but with the return of health it was found that she had lost the power of using her lower extremities. She still continues paraplegic.

In the case of the young gentleman already detailed, you will recollect that the paralysis was entirely limited to the muscular functions of the lower limbs, and that there was no derangement of sensation, no lesion of the muscular powers of the rectum and bladder. The same thing occurred in this case. There was in the beginning no impairment of sensibility, and the power over the rectum and bladder was uninjured. "Within the last three weeks, however, she has complained of pain in the loins and bowels, and the muscular functions of the bladder are becoming deranged*." Indeed the case is rather unfavourable; it has resisted the ordinary remedies, and threatens to become one of confirmed paraplegia. It is to be observed that in this lady the loss of power was much more complete than in the young gentleman before referred to; his paraplegia was by no means perfect, and yielded to the employment of stimulating frictions to the extremities, combined with a cautious use of internal stimulants and tonics. In neither of these cases was the loss of muscular power so great as to deprive the patients of the use of their legs, while lying in bed. They could then be raised, flexed, and extended with apparent ease and strength, and yet when the patient attempted to stand up or walk, he was totally unable to do either, his legs sinking under him, and even when supported by a person at each side, so as to take the greater part of the weight of the body off the limbs, he was still unable to advance one foot before another. I cannot understand why so great a difference should exist between the muscular force of the legs in the one position and in the other.

Here you perceive, gentlemen, we have more or less complete loss of power of the lower extremities supervening on inflammation of the gastro-intestinal mucous surface. Of this I have now witnessed several examples. How are we to account for this? In what way does paraplegia arise from inflammation of the bowels? The mode in which I would explain this phenomenon is as follows. The impression made by inflammatory derangement on the nervous filaments distributed to the mucous coat of the intestines is propagated to the spinal cord, and from this reacts on the muscular functions of the lower extremities. It is true that the intestines and most of the abdominal organs are almost exclusively supplied with nerves from the great sympathetic; but you are to recollect that these communicate by

numerous branches with the spinal nerves, and that, consequently, morbid impressions made on their extremities may be rapidly and extensively propagated to the spinal cord, and from thence by a reflex action to the muscular nerves of the lower extremities. When I first met with cases of paraplegia after inflammation of the bowels or fever with gastro-enteric symptoms, I thought that, owing to some peculiarity in the case, the great lumbar nerves had become implicated in the disease, that there was an actual inflammatory state of the neurilema, accompanied by thickening and effusion, which by compressing the nervous matter gave rise to the paraplegic symptoms. A more extensive review of the subject, however, has convinced me that this is not the fact, for, if it were, the affection of the nerves would naturally be attended with acute pains shooting in the direction of their course, for, as far as my experience goes, in every instance of inflammation attacking the neurilema, intense pain is felt in the parts to which the branches of the affected nerve are distributed. Again, though this explanation might apply to cases in which the inflammation was general, as where enteric is combined with peritoneal inflammation, it would not apply to those cases in which the inflammatory action is localised. Thus, in Mr. Stanley's cases, the paraplegia supervened on inflammation principally limited to the kidneys. In seven cases detailed in Mr. Stanley's paper, we find paralytic symptoms produced, not by any derangement commencing in the brain or spinal cord, but in consequence of an irritation having its seat and origin in the kidneys, and yet, in the majority of his patients, the paraplegia was as complete as if it had been produced by idiopathic disease of the cord or its investments. What was equally remarkable, many of those cases were accompanied by spinal tenderness, so that the most experienced practitioners on a review of the symptoms were inclined to look upon them as cases of disease affecting the vertebrae, or the spinal cord and its sheath. Yet on dissection there was no caries of the bones, no destruction of ligaments, no remarkable vascularity, softening, or suppuration of the spinal cord, no inflammation of its membranes, or effusion into its sheath. In almost all, the morbid phenomena were confined to the kidneys; there were depositions of pus dispersed through their substance, and the mucous lining of the infundibula, ureters, and bladder, was thickened and vascular. The formation of purulent matter was not, however, connected with the paraplegia further than as being, like it, produced by the same cause, inflammation of the kidney. In one case the paraplegia was very complete, and yet the inflammation of the kidney had not advanced to the stage of suppuration.

There can be little doubt that others have frequently noticed the occurrence of paraplegia after inflammation of the bowels, although no

* This sentence was inserted on the 23rd March, 1835. Mr. Carmichael and Dr. Nalty have seen this lady repeatedly.

author has as yet written upon the subject. It is well to be acquainted with the occasional occurrence of so untoward and obstinate a sequela of enteric inflammation, in order that we may watch attentively the state of the lower extremities immediately after the inflammation of the bowels has been subdued. As the patient in such cases has no pains in his limbs, and is not conscious of any loss of power until he attempts to stand up, and as this attempt is not usually made for many days after the subsidence of the inflammation of the bowels, in consequence of the great debility which the disease and the active treatment necessarily resorted to produce, this variety of paraplegia is very liable to be overlooked in its commencement, and is thus neglected at the very period when treatment is most likely to prove beneficial. The foregoing observations have, no doubt, excited a suspicion in the minds of some of you, gentlemen, that the paralysis so often observed to follow painter's colic may be derived from a reaction of the nervous system of the bowels on that of the muscular system in general. Dr. Bright, indeed, has asserted that inflammation of the spinal marrow or sheath, as denoted by spinal tenderness, always precedes the paralysis produced by lead. It often does, but by no means constantly, for I have pointed out to you several cases in this hospital, in which not the slightest vestige of spinal tenderness could be detected either before the commencement or during the progress of the paralysis which so often follows painter's colic. I am not inclined to adopt the supposition that the paralysis in such cases is merely secondary, and the result of the intestinal irritation. I think it much more probable that it depends on the poisonous effects of the lead acting directly on the nervous system. The same observation applies to the paralysis which so often occurs as a result of large doses of arsenic. Orfila has remarked that some of the dogs he experimented on, and which narrowly escaped dying in consequence of large doses of arsenic, became, when they recovered from the immediate effects of the poison, permanently paraplegic. I look upon this paralysis as a direct consequence of the deleterious action of arsenic on the nervous system, and not as the result of the gastro-enteritis it invariably produces. The fact, however, is well worthy of attention that both arsenic and lead produce intestinal irritation in the first instance, and loss of muscular power in the second. A knowledge of this fact will prepare us for understanding the connexion which appears to exist between intestinal irritation and paralysis.

In a lecture published by my colleague, Dr. William Stokes, in the 137th number of the *London Medical and Surgical Journal*, he makes the following observations, which I shall beg leave to quote:—"Here, then, we have well-marked paraplegia without any perceptible organic change in the spinal cord or its investments, but presenting distinct traces

of disease in the kidneys. This leads me to observe the very close connexion which exists between the kidneys and spinal cord, a connexion which has been long recognised by medical practitioners, but only in a limited point of view; for, though they were of opinion that disease of the kidneys and a discharge of ammoniacal urine were the results of spinal disease, they never seem to have reflected that the reverse of this might happen. It seems, however, now to be almost completely established, that disease of the kidneys may produce symptoms which are referable to disease of the spine. Medical men have been too much in the habit of looking at this matter only in one point of view, they know that disease of the spine will produce disease of the kidneys, and here they stop; but it has been shown that the reverse of this may happen, and that renal disease may produce very remarkable lesions in the functions of the spine. Of this very curious occurrence we have many analogies in pathology. Thus, for instance, in several cases of cerebral disease, but particularly in hydrocephalus, we have vomiting; here we have functional disease of the stomach depending on disease of the brain. Take the reverse of this,—observe the delirium which attends a case of gastro-enteritis; here you have the functions of the brain deranged in a most remarkable manner, and this produced by sympathy with an inflamed mucous membrane. The truth is, that in the spine and kidney, as well as in various parts of the body, we may have two organs so closely connected in sympathy, that disease of the one will bring on serious functional lesion of the other."

It will be seen that these observations coincide in many points with the principles I have laid down in the published lectures which I delivered on the subject of nervous pathology, and to which I have already referred. On this point Mr. Stanley makes the following remarks:—"In reflecting on the phenomena of the first series of cases which have been detailed in this paper, it might be thought improbable that irritation commencing in the kidney or in the bladder should be propagated through sentient nerves to the spinal cord, and that the impression should thence be transmitted through both the motive and sentient spinal nerves to the limbs, here occasioning an impairment both of sensation and of the power of motion. Some illustration of this subject seems to be furnished by the researches of experimental physiology. If in an animal, a few seconds after it has been deprived of life, the spinal cord be then divided in the middle of the neck, and again in the middle of the back, upon irritating a sentient organ connected with either isolated segment, muscular action is produced, that is to say, a sentient organ is excited, and an irritation is propagated through the sentient nerve to the isolated segment of the spinal marrow, where it gives rise to some change,

which is followed by an impulse along the voluntary nerves to the muscles of the part*.' In the instances which have been adduced, irritation commencing in the nerves of an internal organ, the kidney, has been transmitted through the spinal cord to the motive and sentient nerves of the lower extremities; but the same phenomena may occur in an opposite order, as in the case of a compound fracture, or other severe injury of the lower extremity, followed by retention of urine from irritation arising in the anterior crural and ischiatic nerves, and communicated through the lumbar and sacral plexuses of spinal nerves to the nerves of the bladder. Extending these views to cases of neuralgia where there is no visible derangement of structure or other local cause of excitement, it will always be difficult to determine whether the source of irritation be in the affected nerves, or in the central portion of the nervous system whence they are derived."

You will perceive that this explanation, as far as it goes, though not in the same words, is in meaning the same as that which I have given, with this exception, that it is only a corollary of the general principles which I had laid down in my lectures on the pathology of the nervous system. Long before the publication of Mr. Stanley's paper, I had established the proposition that impressions made upon any portion of the nervous extremities may be propagated towards their centres, and thence by a reflex action transmitted to the nerves of other and distant parts, so as to give rise to morbid phenomena analogous to those which are produced by disease originating in the central parts themselves. Applying this principle to the subject of paraplegia, we shall find that, independently of cerebral or spinal disease, it may arise from a variety of causes, each referable to lesions commencing in distinct and isolated portions of the nervous extremities. Thus in Mr. Stanley's cases, the exciting cause seems to have originated in the urinary system; in the cases which I have detailed, where it supervened on inflammation of the bowels, it commenced in the digestive, and it appears, from a communication made to Mr. Stanley by Mr. Hunt, of Dartmouth, that the same thing may result from irritation existing in the uterine system. Mr. Hunt alludes to several cases of disease of the uterus being followed by such loss of power in the lower limbs that the patients were entirely confined to bed, adding that there was no change of structure in the parts to which the symptoms referred as the source of irritation. In addition to these, I shall in my next lecture bring forward several cases to prove that a similar loss of power may be produced by the action of cold on the lower extremities. Indeed, the number of cases which I have recently met with, where

paraplegia was evidently brought on by exposing the lower extremities to cold and wet, has very strongly directed my attention to this form of the disease, and I trust I shall be able at our next meeting to communicate some very interesting matter on the subject.

I shall conclude this lecture by reading the following case, for which I have been indebted to the kindness of my friend Dr. Hutton.

"Richard M'Nab, a sailor, aged 38, was admitted into the Richmond Hospital on the 16th of January, 1835, and placed under Dr. Hutton's care. His previous history was briefly as follows: in the summer of 1826 he strained his back in leaping, and was confined to bed in consequence of the accident, but recovered in about twelve days. Shortly afterwards he contracted gonorrhœa, which was attended with hernia humoralis; this yielded to repeated local bleeding, but a gleet remained, and this, after continuing for some time, disappeared under the use of sea bathing. He then enjoyed good health, with the exception of occasional slight pain in the lumbar region, until October 1830, when, being much exposed to cold and wet during a long and fatiguing voyage, he got an attack of piles, for which he was under medical treatment for seven months. During the continuance of this affection he first observed a frequency in micturition, but had no retention or sensible obstruction of urine. After recovering from the hæmorrhoidal attack, he enjoyed good health until September 1831, when, coming from Cadiz to the port of Dublin, in a very leaky vessel, he suffered greatly from cold, wet, and fatigue, being almost constantly engaged at the pumps, which could not be left for ten minutes at a time. In addition to this, being deprived of his usual allowance of spirits for thirty-two days, he found himself, on his arrival in Dublin, in a very weak state. He rested from his occupation for a fortnight after discharging his cargo, and states, that during this time he drank from four to six glasses of whiskey daily. He then went on board the Elizabeth of London, as chief mate, but, after eight or nine days, his back and lower extremities became affected with pain and weakness, which increased to such a degree that he was obliged to give up his occupation on the thirteenth day. He states, that during the time his back and legs were getting weak he was obliged to pass water about three times in an hour, which he did with pain and tenesmus. On the 1st of January the pain of his back was very severe, and he lost the use of his limbs, but not completely, for he could support himself, and even walk a little with the aid of two sticks.

"At the time of his admission he appeared somewhat broken down in his general health; he was pale, emaciated, and laboured under derangement of his digestive organs. He suffered from occasional chills, succeeded by heats and sweating, which occurred at irregular periods; he also laboured under micturition,

* Outlines of Human Physiology, by, H. Mayo.

dysuria, and the stream of urine was much diminished. The weakness and loss of power in his lower extremities as reported.

"His treatment was as follows:—First, cupping over the loins, then moxæ in the same situation; attention to his digestive organs; diluents and opiates for the urethral symptoms. On the 26th of the same month a very close stricture was found to exist in the membranous portion of the urethra. A small catgut bougie of double length was introduced, so that one half of it projected from the meatus; over this was slid a small gum elastic catheter of ordinary length, and open at each end, until it traversed the stricture and reached the bladder; the catgut bougie was then withdrawn, and the gum elastic catheter secured. A little constitutional disturbance followed, but soon subsided; and in a few days gum elastic catheters of a much increased size were introduced with facility.

"A very remarkable amendment took place in his back and lower extremities in a very few days after the first introduction of the instrument; in fact, it was almost sudden. Warm baths, friction to his limbs, &c., completed his cure. He was discharged on the 25th of February, at which time the power of his lower limbs was perfectly restored, and the symptoms affecting the urinary system had disappeared."

You at once perceive the extreme importance of this case, gentlemen. It bears directly on the question before us, and proves that urethral irritation may, as well as inflammation of the kidneys, give rise to paraplegia; and it affords another striking illustration of the general proposition which I have laid down.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXVII.

Perforation—Artificial Premature Labour.

GENTLEMEN,—I have hitherto described to you those obstetric operations which are intended to preserve the life of the child as well as that of its mother; I now come to those where it is the painful duty of the practitioner to sometimes sacrifice the former in order to save that of the latter, or, in other words, I have now to offer you a few observations on *perforation* and *embryulcia*. Perforation is that operation where, by means of sharp instruments, we *perforate* the cranium, and thus, allowing the brain to escape, diminish the bulk of the head.

No part of the armamentarium *Lucinæ* is so rich in instruments as this, for in no operation has there been so many invented as for that of destroying the child. In former times, when turning the child and the application of the forceps were unknown, the only means of delivering the woman was by lessening the head, and bringing the child away by sharp hooks. The operation consists in introducing two or three fingers into the vagina to that part of the head where we intend to perforate, we then pass the instrument along them carefully, to prevent wounding the parts of the mother, and, having inserted it into the skull, we draw it partly out again, and, turning it the quarter of a circle, it is again inserted so as to make a crucial opening. To facilitate the evacuation of the brain, it will be advantageous to inject warm water through the aperture in the cranium; if this be forced up pretty briskly, it loosens the attachment of the brain, which, being mixed with the water, becomes more fluid and escapes more readily; hence the cranial bones collapse sooner. For this purpose I use a syringe with an elastic tube, about a foot in length, and having previously broken down the structure of the brain with the perforator as much as possible, I insert this through the opening, and pass it down to the base of the skull; the water completely dislodges the brain, and in proportion as you pump in the one you expel the other. This expedites and facilitates the process very considerably. When the bones have collapsed the forceps will no longer have any hold upon the head; we must therefore use a hook, which, although not sharp enough to injure the fingers, is still sufficiently pointed to hold fast when fixed into the base of the skull. The point of the instrument should be carefully guarded by a finger of the other hand, and, when fixed into the skull, this finger should be pressed against the outside, corresponding to the part where the hook is fixed in the inside; this prevents us running any danger of injuring the mother in case the instrument should slip; the other fingers and thumb should grasp the shank of the hook for better support; it will thus give us warning when the hook is about to slip, and serves to preserve our finger from being wounded.

The perforation is indicated, first, in all cases where the labour is dangerous for the mother, and where the antero-posterior diameter, although more than two inches and a half, is so small that the head which presents cannot be delivered by the forceps.

The perforation has been opposed by some authors as barbarous; thus the celebrated Professor Oslander declared that this operation was altogether unnecessary, for that in every case in which it was indicated, he was enabled to deliver the patient by means of his forceps. You will recollect that I described these forceps to you as being peculiar, not only from having no fenestræ, but also on account of their great length; he was thus enabled to employ

a degree of force which, in my opinion, nothing could justify. When once convinced of the child's death, where labour was at all difficult, or circumstances in other respects at all unfavourable, I should consider it just as barbarous not to perforate as to perforate where it was unnecessary.

The perforation is indicated, secondly, where the head is much larger than natural, as in hydrocephalus; here, although compelled to perforate, Osiander would not call it perforation, but *paracentesis*.

In former times, a great variety of instruments were used for the purpose of perforating the head; they were chiefly hooked or *unciformia*. Some have been made straight, some curved, more or less pointed, sharp or blunt, simple or double; some were scalpel or lancet-shaped, *cultriformia*; some, like the spatula minus of Albucasis, had quite a peculiar form.

The perforators which have been used in modern times are mostly scissor-shaped, *forficiformia*. La Motte, Giffard, and Ould used common scissors, and Ræderer, in case of necessity, frequently used a strong pair of scissors. Among the perforators of this sort, those of Bing, Smellie, Levret, and Denman deserve particular notice. The scissor-shaped perforator has this advantage, that it can be protected by the hand alone, and introduced up the vagina without any danger of hurting the mother, and a sufficient opening made for evacuating the brain. The perforator of Smellie has the cutting-edge on the inside, precisely like a pair of scissors, the outer edges, which are neither exactly sharp nor blunt, have two projections or shoulders to prevent the instrument from passing in too far. Of this you will find an engraving in his last plate. The perforator of Levret and Denman has the outer edges somewhat sharp, the inner ones lying flat upon each other. Bing, of Copenhagen, had the merit of first inventing this perforator, but, having been adopted by Levret, it always went by his name.

The operation of *embryotomy* is merely a degree further than the perforation, for here the child is brought away piecemeal. No peculiar instrument is necessary for this purpose. The perforator of Smellie is best adapted for opening the chest, because, being precisely like a pair of scissors, we can cut through the ribs and cartilages with it. The hook generally used is one which was originally invented by Smellie, but Stein has added a convenient handle, which enables us to have a much firmer hold: it has also a curve, which was said to have been given to it by Levret, but this is doubtful, as Smellie himself has described it as curved. It is neither exactly sharp nor blunt, for, although it is not sharp enough to cut, it nevertheless is sufficiently pointed to hold.

Hitherto all perforators were either *unciformia*, *cultriformia*, or *forficiformia*. In later years, Assalini, and Joerg of Leipzig,

each invented, at the same time, a trepan-formed perforator. Assalini's consists of a steel barrel with a trepan at the end, through which passes a steel rod, at the extremity of which is a screw. When the instrument is introduced against the spot where it is intended to perforate, the screw is first fixed into the cranium, and a circular piece sawn out, which is brought away by the screw which is fixed to it. Joerg's is nothing more than a common trepan sliding in a metal sheath. Both instruments are useless, for they do not fulfil one chief object of perforation, namely, splintering the bones of the cranium. This has been objected to by some, on the score that the sharp angles and edges are liable to injure the soft parts of the mother; but there is no fear of this so long as they are covered by the cranial integuments. Assalini has also invented a species of forceps for cases where the antero-posterior diameter is less than two inches and a half, by which we may be enabled to turn the basis crani and bring it away obliquely, as Dr. Osborn is said to have done in the case of Elizabeth Sherwood. The forceps do capitally well on a skeleton pelvis: they have only one fault, gentlemen, namely, that they are quite inapplicable on the living body. When Mauriceau perforated, he first used an instrument shaped like a spear head, with which he made the opening, and then introduced a peculiar species of extractor, for which I must refer you to his work. In Aitken's Principles of Midwifery you will find a great number of different instruments described which had been used for perforation. The late Wigand of Hamburg was in the habit of using rather a peculiar-shaped perforator: it consisted of a long curved piece of steel, at the end of which was a sheath like a spear or serpent's head. By pressing a button in the handle a broad lancet rose out. It is an extremely dangerous instrument, and from merely perforating in the sutures or fontanelles, could not fulfil all the purposes of perforation. As soon as the bones began to collapse they would overlap each other and thus close the opening; hence the most favourable place for perforating is the parietal bone, for you not only make an opening which cannot possibly be closed in the manner I have just mentioned, but it is reached more easily than any other part of the head, because, as you all know, this is the part which presents. The late Ræderer when performing *embryulcia* used a curved bistoury, to which were attached two rings so as to fit upon the finger, and be thus introduced into the vagina; but this is also extremely dangerous, and can scarcely avoid injuring the mother. I am rather inclined to doubt if this be an original invention of Ræderer, because Spence, in his midwifery work, mentions that Dr. Simpson, a physician at St. Andrews, some time before 1751, proposed an instrument, called "the ring scalpel" for opening the head of the child.

The common perforator of the present day

is that which was first used, in this country, by Orme and Denman: the blades are short, but the handles are long, and by thus forming a long lever enable us to open them with greater facility when the instrument has entered the head. One disadvantage is, that we cannot open them merely with the finger and thumb of the hand which holds them, so as to enlarge the opening sufficiently. Professor Naegele of Heidelberg has therefore made the hinge so, that when we press the handles together the points open. The hand can act here with much more power, and we need never take the finger of the other hand away from the head of the child to assist in opening the points of the perforator. Mr. Weiss has also invented a perforator on a similar principle. When the brain is evacuated, the forceps, from the collapsing of the cranial bones, will no longer hold; this we also occasionally meet with in cases of difficult labour. We are sent for, and find that a practitioner has already made several attempts to deliver with the forceps. On applying them ourselves, we find that they are introduced easily enough, but will not hold; this results from the cranial bones having been broken and splintered from too much violence having been used. It would perhaps be as well to have a pair of forceps for these cases, the blades of which come closer than common. A variety of what have been called *craniotomy forceps* have been used of late years; those recommended by Dr. Conquest appear to be the best; but I do not think that they are often required, for if the brain has been properly evacuated in the manner I have described, the bones collapse sufficiently to allow the head to pass.

From the aversion which we must naturally always feel towards perforation, and from the unsuccessful results of so many cases of Cæsarean operation, an operation which has been justly held in the greatest dread by accoucheurs, necessity has driven them to devise all sorts of methods by which they could by any means avoid putting the operation into practice. Among them, the *partus arte prematurus*, or labour prematurely induced by artificial means, deserves your particular notice. It consists of inducing, artificially, the action of labour before the foetus is fully developed, but yet old enough to support its existence separate from the mother, in cases where we have reason to fear perforation, or at least so difficult a labour, that it is very doubtful whether the child can be born alive. We must not confound the artificial premature labour with the *accouchement forcé* of the French, where, in consequence of dangerous hæmorrhage from placenta prævia, or other causes, the os uteri has to be forcibly dilated and the child brought away—an operation now scarcely ever put in practice.

The premature delivery of the child has been more practised in this than in any other country, and was, I believe, first attempted by a practitioner named Jones, who, having

introduced a female catheter into the os uteri, ruptured the membranes, and waited for the pains. In Germany, Weidmann and Wenzel of Frankfort paid considerable attention to it, and in 1813 the latter eminent surgeon published several cases where the waters had been drawn off, and labour induced: these practitioners must be rather looked upon as exceptions, for almost all the other German authorities in the obstetric art were strongly opposed to it. Baudelocque also disapproved of it: the reasons which he assigned were, that we could never be certain of the time when it was proper to perform the operation, because there was no relying upon the correctness of a woman's reckoning; that the cervix uteri, in the seventh month, is seldom open, but is still thick, closed, and hard; that the pains or contractions of the uterus under such circumstances can only be induced by pretty strong mechanical irritation, and that, as this is merely artificial and not natural, the pains will frequently disappear the moment we cease to excite them by such irritation; that if the membranes be ruptured before the os uteri be sufficiently dilated, and the uterus active enough to expel the child, the pains will cease entirely, and the uterus having no liquor amnii to distend it, it contracts immediately upon the child, which becomes the victim to such treatment, &c. It is evident that when Baudelocque wrote this, he had the *accouchement forcé* before his eyes, where not a moment of time is to be lost, and from profuse flooding, &c. the patient is in imminent danger: this, however, is *not* the artificial premature labour.

Among his objections, Stein, jun., says, that the difference between the size of the child's head at the period which is fixed for inducing premature labour, and of one which has been carried the full time, is not sufficient to give any hopes of success. When Stein made these objections, he forgot the physical qualities of the cranial bones at that period, how soft and yielding they are. Oslander and Young were still more vehement against it, and abused it most violently.

It is to the late Dr. Denman that we are indebted for the first observations on this method of practice; and for a more particular account of his views on the subject, I must refer to his great work on midwifery. Since this time, an excellent monograph has been published on the *partus arte prematurus*, by Reisinger, in which, besides his own valuable observations, he has collected everything of interest which had been published in England or Germany: those who so furiously opposed it gradually became silent, and during the last few years it has been practised with great success.

Experience has shown that it was not necessary to induce labour at so early a period as was first imagined, on account of the very great difference which even one or two weeks are found to make in the hardness of the foetal skull; thus, for instance, in cases where the an-

tero-posterior diameter was only three inches, six weeks before the usual term of utero-gestation were found sufficient; and where it was three inches and a half, fourteen days made sufficient difference in the foetal skull. After the rupture of the membranes it may be twelve, thirty, or even sixty hours before any uterine action begins to be perceived, we should avoid any attempt to hurry the process, which should be as gradual as possible, and the patient should preserve a state of perfect quiet. Dr. Denman and Dr. Merriman have both remarked that, in a number of cases, a smart shivering fit and febrile attack had followed the operation, and sometimes even with slight delirium; and in many cases which have terminated unsuccessfully, and where a sudden fit of severe shivering had been observed, it was considered as a symptom of the child's death; and some practitioners actually tried by warm drinks, &c. to prevent it, as if this could preserve the child's life. We can scarcely, however, consider it as denoting the child's death, for, in two cases where this shivering was very severe, Professor Naegelé told me that he had seen the child born alive and healthy. In one case, where the febrile attack was very severe, Dr. Merriman gave a smart cathartic, with calomel, which, having brought away a large quantity of fetid dark-coloured *stercus*, produced much relief.

From the passive state in which the uterus is during pregnancy, and from the distance of the os uteri, it is frequently exceedingly difficult to pierce the membranes, as there is no contraction to press them against the os uteri. If the os uteri be not low enough in the pelvis to perform this operation conveniently, Dr. Haighton recommends us to direct the patient to strain and bear down; but this end can be equally well attained by binding a broad bandage tight round the abdomen. The instrument which my friend, Dr. Hugh Ley, uses for this purpose is very convenient: it is a common male catheter, slightly curved and perforated at the extremity, so as to permit of a stilet to be pushed out. After puncturing the membranes, a warm dry cloth should be placed against the pudenda to receive the liquor amnii, and the patient should preserve a state of perfect quiet for several hours.

It is evident, in cases where the membranes are merely ruptured, and the water evacuated, that as the inferior segment of the uterus is not yet sufficiently developed or dilated, it must oppose a considerable obstacle to the passage of the head, and hence prove unfavourable to the life of the child. Professor Kluge, of the Charité at Berlin, tried a sponge tent, in order to dilate the os uteri, and thus hasten labour; but, as soon as the uterus begins to contract of itself, its inferior segment yields spontaneously. Our object, gentlemen, is not to deliver the child as soon as possible by main force, but to excite the uterus to contractions, and thus induce a natural labour, in which the child may be born alive; hence

Carl Wenzel has recommended not to let off the liquor amnii *at once*, for the slower this is done, the greater are the chances of a successful result, for by this means the *gradual* evacuation of the liquor amnii makes the artificial premature labour resemble natural labour still more, and the contractions of the uterus act more gradually upon the foetus, and with less violence.

Professor Naegelé has observed, that where the artificial premature labour had been once induced, the uterus frequently shows a disposition to expel its contents in succeeding pregnancies at the same time. Mr. Barlow has also noticed this fact in his third case (published in the eighth volume of the *Medical Facts and Observations*, 1800); where six children had been born by means of premature labour artificially induced, he mentions that in one of these labours the pains had come on spontaneously at the usual time at which, in the preceding ones, the membranes had been punctured. In his fifth case, where four children were thus born, the last labour came on spontaneously at the seventh month. In most cases the secretion of milk has followed as after a regular labour; this is a great advantage, for the thin imperfect secretion at this early period is much better adapted to the weak digestive organs of the premature born child; it is seldom that we can get a child under these circumstances to take the breast at first, and this is the chief reason why their digestive organs become so soon deranged, and why premature children are apt to pine away. In case no milk be present, a good substitute will be made by beating up fresh eggs and milk, boiling them over a gentle fire, and straining off the thin fluid.

It seems a little singular that practitioners should have never thought of exciting the activity of the uterus *before* they ventured to puncture the membranes, for when once a contraction has been induced they become instantly tense, and can then be ruptured with perfect ease and safety; the secretion of mucus at this period of pregnancy is most remarkably abundant, and greatly facilitates the whole process. The upper part of the vagina and the os uteri are frequently felt covered with small round lumps or knots of what feels like soft fat; these are called the *ovula Nabothi*, and are merely little sacculi of transparent mucus, which exudes upon slight pressure. This fact has also been noticed by Mr. Marshall, who observed in every case of premature labour artificially excited, that as the labour came on a very considerable quantity of mucous fluid was discharged, which appeared to be a natural substitute for the liquor amnii, and which must greatly facilitate the process of expulsion. In cases of faulty presentation of the child, turning of course must be used, and under these circumstances it will prove highly unfavourable for the child; where the diminution of the pelvic diameters

is considerable, it is frequently accompanied with a considerable inclination of the pelvis and pendulous belly, both of which greatly increase the difficulties of this operation; in other respects, I cannot see why the *partus arte prematurus* should not be nearly as favourable as labour at the full term of pregnancy; it does not possess the unfavourable character of other species of premature labour, because the hæmorrhages which are so apt to attend them are never known to occur here, and the author of an excellent essay upon the subject in the *Journal Générale de Médecine*, Sept., 1827, speaks of it in very high terms. It is to my excellent friend and teacher, Professor Naegelé, that we are indebted for first practically demonstrating the advantages of exciting the contractions of the uterus before we punctured the membranes. The first case where he attempted this method, was a patient whom he had delivered by perforation in 1819; he then ascertained that the antero-posterior diameter of the pelvis was scarcely three inches; several children were born in a similar manner; being again pregnant, for the fifth or sixth time, he determined if possible to save the child by inducing premature labour. Five weeks before the full term of her pregnancy he ordered her to use the warm bath daily, and then have the abdomen rubbed for some time with opodeldoc; still further to induce uterine contractions, he made her sit over the steams of hot water; at last pains came on, they gradually increased, and a living child was born. Having read in an English journal that laxatives had assisted considerably in inducing contractions of the uterus, Professor Naegelé has used them, in combination with vapour-baths and other means, with good effect, but these cannot always be relied on, especially purgatives and laxatives, as is seen by the following case. "I had once a case, where, from the narrowness of the mother's pelvis, several children had been sacrificed from the severity of her labours. The parents being of the better class of society were extremely desirous that if possible one should be saved. The patient fancied herself this time larger than usual, and was under great apprehensions that the child would be too large to be born, even with the assistance of the forceps. I placed her for a whole hour in a warm-bath, and had the abdomen well rubbed with opodeldoc, but not the smallest sign of uterine contraction followed. I then gave her a strong dose of drastic purgative, which, although it was repeated until it produced colicky pains, excited not the slightest appearance of action in the uterus. I then tried a smart laxative and warm-bath at the same time, but was equally unsuccessful. Having wasted some time in these fruitless attempts, and as she had only fourteen days longer to go, I at last ventured to try the *secale cornutum*. I gave her fifteen grains of it early in the morning, and after a short time she experi-

enced a few slight pains; I repeated the dose, the pains became stronger, they quickly increased, and the child was born alive, and is now about three years old *."

Dr. Hamilton, of Edinburgh, excited the uterus to contract by introducing a female catheter into the os uteri, and separating the membranes from the womb to a considerable distance from its mouth.

The late Carl Wenzel, of Frankfort, asserted that his teacher, Weidmann, was the first in Germany to propose this operation, having pointed it out in his inaugural dissertation, entitled "*Comparatio inter Sectionem Cæsaream, et Dissectionem Cartilaginis et Ligamenti Pubis*," but the late Professor May, Heidelberg, in a dissertation published under his auspices, entitled "*De Necessitate Partus quandoque Prematuri Provocandi*," 1799, was not only the first to propose this operation, but also recommended exciting the contractions of the uterus by warm-baths, &c.

OBSERVATIONS ON A PECULIAR SPECIES OF DEFORMED FEMALE PELVIS.

BY FRANZ CARL NAEGELE, M.D.,

Professor of Midwifery at the University of Heidelberg, &c.

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COMMUNICATED BY EDWARD RIGBY, M.D.

THE peculiarities of this species of deformed pelvis which I am about to describe, are, according to my observations, as follows:—

1st. That the pelvis appears awry, so that the symphysis pubis is pushed to one side, the sacrum to the other, these points of the pelvis not being opposite to each other, but oblique, and the entrance, cavity, and outlet of the pelvis contracted in the direction of one oblique diameter, and not in the direction of the other, but in cases of considerable deformity, even wider than natural, so that the superior aperture and cavity of the pelvis exhibit the appearance of an oval directed obliquely to one side, its shortest or transverse diameter corresponding to one oblique diameter of the pelvis, its long diameter to the other.

2nd. That the sacro-iliac sychondrosis, towards which the small end of this oval is turned, has become completely ossified, so that at this point scarcely a trace of the former mode of connexion is to be perceived.

3rd. That the side of the sacrum which corresponds to this spot appears destroyed or not properly developed.

4th. That the symphysis pubis is inclined to the opposite side to where the sacro-iliac sychondrosis is ossified, whereas the sacrum appears bent in the contrary direction.

* MS. Lectures.

5th. That the lower part of the pelvic cavity converges somewhat in an oblique direction.

6th. That the anterior half of that os innominatum, on the side where the ossification is, displays a much smaller degree of curvature than is observed in a well-formed pelvis, being much flatter, so that its surface is nearly plane, and if a line be drawn on this side of the brim, from about the middle, or (viz. in more aggravated cases of this deformity) even from the posterior extremity of the linea innominata, and behind the body and crest of the os pubis, up to the symphysis, it will be found to run nearly in a straight direction. I have never observed this in a pelvis of this sort, where the side was curved inwards.

The necessary result of this distortion is that the acetabulum on the flattened side is situated more anteriorly than is the case in a well-formed pelvis, whereas the other is turned quite outwards, so that, in taking a front view of the pelvis, we look directly into one acetabulum, whereas the other is either quite out of sight, or merely a small portion of its cavity visible. It may be observed, moreover, that the length of the os ilium on the side which is ossified, viz. between the anterior and posterior superior spinous processes, is less than that of the opposite side, the whole os innominatum of which presents no deviation whatever from the usual form.

With respect to the strength, colour, structure, &c. of the other bones of this species of deformed pelvis, no difference could be observed between them and the bones of young and perfectly healthy subjects; not a trace, either in form or other respects, could be detected of those changes which usually result from rachitis or mollities ossium, and, but for this distortion, and some other slight irregularities which required close inspection to detect, these pelves would have been looked upon as well shaped, and of sufficient capacity.

In two of the cases which have come under my immediate observation, no distortion of the spine existed; in two, however, the lumbar vertebræ are twisted, one towards the left, where the right sacro-iliac synchondrosis was ossified, the other towards the right, where ossification had taken place upon the left side. (See Cases 5 and 9.) What the condition of the superior portion of the spine was in these two cases, I had not the means of ascertaining. In Case 9, the distortion was so slight as not to have attracted notice. In four cases, (the particulars of the others I do not know) the anterior surface of the lumbar vertebræ is turned somewhat to the same side on which ossification of the sacro-iliac synchondrosis had taken place.

In none of the cases, the particulars of which have come to my knowledge, has there been any trace of rachitis, nor have any of the symptoms, appearances, and morbid changes been observed which characterise mollities ossium coming on after puberty.

None of the cases have been traced to the effects of external violence, as falls, blows, &c., nor has there been any complaint of pain in the region of the pelvis, inferior extremities, &c.

Nine cases of this species of deformed pelvis have come under my own immediate observation, besides those which have been mentioned to me at different times by practitioners who, without having been previously aware of this peculiar deformity, had, in consequence of my mentioning it to them, recollected that they had either seen or possessed pelves of a similar kind. These pelves only differ from each other in the degree of contraction, and in the side at which the sacro-iliac synchondrosis is ossified; in all other respects they are as like each other as possible*, so much so that a person who is not aware of it, and has seen a pelvis of this sort, is half inclined to suppose, when he meets with a similar pelvis elsewhere, that it must be the same which he had seen before. This remarkable similarity would lead one to suppose that the cause or origin of this deformity was subject to some peculiar law. But, before proceeding further, let me call the reader's attention to the following description of these pelves:—

The two first I saw, in 1803, in my native district with a medical friend, in whose practice one of them had occurred. The patient was a healthy, robust, middle-sized peasant woman, æt. 19, in her first pregnancy. With the exception of the diseases of childhood, she had always enjoyed the best health, and had every reason to expect a favourable labour. The patient had had pains thirty-six hours when he was called, and the membranes had ruptured twenty two hours. He found the head still very high, and tightly fixed in the superior aperture, although the pains had continued severe since the rupture of the membranes. He at last succeeded in fixing the forceps, although their application was attended with considerable difficulty, and they had slipped several times. Still, however, he was unable to bring it further. He called in another practitioner, and, after considerable exertion, they at last succeeded in delivering the patient. The child, which had a considerable swelling of the cranial integuments, was dead, and the mother died on the fourth day after of abdominal inflammation. On the left side of the pelvis there was no trace of sacro-iliac synchondrosis to be seen; the left half of the sacrum was destroyed; the left oblique diameter of the brim was 4" 5"', the right 3" 4"'; the symphysis pubis was pushed over to the right side, and the anterior half of the left side was flatter than it is in a healthy pelvis; the other pelvis was exactly similar, except that the left oblique diameter measured

* The characteristic German expression is "wie ein ei dem andern," as one egg is to another.

4" 7", and the right only 3"; the inner surface of the left os innominatum, as far as this influences the form of the pelvic cavity, was much flatter than in the other specimen. Of the history of this case nothing was known beyond that it had been a young primipara, in whom perforation had been required before she could be delivered and who had died twenty-four hours afterwards.

The third case which I myself had the opportunity of observing is as follows:—

A blooming healthy brunette, æt. 19, rather above the middle stature, slender, and well made. It struck me as we carefully watched her when walking that she limped slightly, as if the left leg was somewhat shorter than the right, but it was not observed by the others who were present at the examination, and her parents and the rest of her family assured us that they had never perceived the smallest sign of lameness. She had always enjoyed good health, was always cheerful, was fond of dancing, and lived in the simplest manner. From her earliest youth she had been accustomed to be a good deal in the open air of a salubrious and beautiful district, and had never been exposed to hard work or much bodily exertion; her parents and family were healthy, her mother was well made, and in the course of fifteen years had had twelve children, with easy and natural labours. Her father and one of her two brothers are remarkably tall; this brother, upon examination for a recruit, was found to have the right hip higher than the left, and was on this account consigned to the baggage department.

The patient had menstruated regularly from the age of sixteen; had of late years led a very dissolute life, and was now in her first pregnancy. Admeasurement of the pelvis, by means of Baudelocque's callipers, gave an antero-posterior diameter of full seven inches, in other respects, as she was rather fat, the external examination gave little information. Upon examination per vaginam, the head was not found low and pretty firmly fixed in the pelvis, as is the case with primipare, but it was high up, and very moveable; the promontory of the sacrum could not be reached either with one or two fingers; the membranes ruptured two days before her labour began. During the first day, the pains were weak, but on the following day they were disproportionately painful in comparison to their strength, although not lasting, and it was not until the third day of labour, that the head had so far entered the superior aperture as to make us suppose that the forceps might be safely applied; the extraction of the head by means of this instrument was so difficult, and required so much exertion, that we afterwards regretted not having perforated; the placenta was retained by stricture of the uterus, and after waiting an hour the appearance of hæmorrhage made it necessary to be extracted artificially. The child, which was

dead, was a male, and weighed *libj. 3xvss.*; the face was swollen and livid, and there were marks of putrefaction, especially upon the abdomen. On the following day the patient was attacked with symptoms of puerperal fever, with profuse diarrhœa, and died on the fifth day after delivery.

The post mortem examination showed nothing unusual in the cranial or thoracic cavities, except some considerable adhesions of the lungs, evidently of long standing. On opening the abdomen, the intestines were found completely covered by the omentum. The uterus, which was about the size of a full-grown fœtal head, presented no unusual appearances externally, except that its right angle was higher than the left: its substance, when cut into, appeared natural, nor were any marks of disease to be perceived upon its internal surface, or in the vagina; the broad ligament, the Fallopian tube and ovary of the right side showed marks of violent inflammation, being swollen, red, and the vessels minutely injected with blood. In this situation a considerable quantity of the usual straw-coloured exudation which is observed in puerperal fever was found, a portion of it under the form of coagulable lymph, but the greater part was fluid.

Description of the Pelvis, fig. 1.

At the first glance, the reader will see that the peculiarities in the deformity of this pelvis are precisely as described in the first part of this essay, with these exceptions—it has all the appearance of a roomy and (particularly as regards the strength, structure, and colour of the bones) well-formed pelvis of a young female: when dried and cleaned, it weighed, together with the three lumbar vertebrae which are attached to it, $17\frac{2}{3}$ $3\frac{1}{2}$ 3 . The left os innominatum appears as if pushed upwards and inwards, so that the crista of the ilium, the acetabulum, and tuber ischii of the left side are higher than those of the right. In like manner the spine of the left ischium is situated higher and more posteriorly than the right, and its distance from the transverse process of the first coccygeal vertebra is 9", whereas that of the other is 1" 9". A line drawn from the middle of the left linea innominata behind the body and transverse ramus of the left pubic bone, nearly up to the symphysis, diverges scarcely at all from a straight line. The breadth of the left os ilium, viz. from the anterior to the posterior superior spinous process is 5' 7", of the right, 5" 10". The distance of the right sacro-iliac synchondrosis, from the centre of the promontory, measures

* It is right to mention that I have omitted several of the more unimportant admeasurements, so as not to occupy too much room. The punctuation for inches and lines as in the original has been adopted for the same purpose.—*Tr.*

2" 2''; of the left, 1" 4''; the hollow formed by the anterior surface of the sacrum is natural; the distance from the centre of the promontory to the point where the body of the os pubis passes into its transverse ramus on the left side, is 1" 10''; on the right side, 3" 5''; the distance also of this spot from the anterior superior spinous process on the left side is 4" 1''; on the right side, 5" 2''. The right os innominatum, and right half of the sacrum, are well formed, except that this latter bone, which has four vertebræ, in the present instance has only three pairs of sacral foramina. The left sacro-iliac synchondrosis is completely ossified throughout its whole extent, nor are there any traces of a separation having formerly existed either anteriorly or posteriorly, so that both bones appear as one. The brim forms an oval, which runs diagonally forwards from left to right, the posterior extremity of which is formed by the left sacro-iliac synchondrosis, and its side by the body and transverse branch of the right pubic bone. The left oblique diameter, which may be looked upon as the great diameter of this oval, measures 4" 7'', the right 3" 5''; the shape of the cavity of this pelvis resembles that of the brim.

I am indebted to my much esteemed friend, Professor D'Outrepont, for the inspection of two other pelvis of this species; in the first (*fig. 2*), the *left* half of the brim and cavity is contracted, as in the three cases above-mentioned; the left sacro-iliac synchondrosis is entirely wanting, and the left side of the sacrum is also defective. The left oblique diameter of the brim measures 4" 4'', the right 3" 3''. Nothing further was known of the history of this case, beyond that she was a primipara, and had died after a severe instrumental labour.

The other pelvis (*fig. 3*) exhibits the same species of deformity, with the only difference that the distortion is in the contrary direction, the *right* sacro-iliac synchondrosis being ossified. The right half of the sacrum is defectively developed, and the symphysis pubis pushed over to the left side. The right oblique diameter of the brim measures 4" 6''; the left 3" 3''. A line drawn from the middle of the promontory to the spot where the body of the os pubis passes into its transverse ramus, measures, on the right side, 2'; on the left, 4''. The distance between the middle of the promontory and the anterior superior process on the right side, is 2" 11½''; on the left, 5" 2''. As far as one can judge of the two lumbar vertebræ which are still attached to the pelvis, the spine appears to have been curved to the right side, the body of the last lumbar vertebra being lower by nearly one half on the right side to what it is upon the left. Professor D'Outrepont has since informed me, he has been able to ascertain that it belonged to a primipara, æt. 20, in whose case Brüninghausen and Carl Caspar Siebold, having endeavoured to apply the forceps without success,

were compelled to perforate; but that, not being able to extract the head by means of the crotchet, the patient had died undelivered.

My friend and former pupil, Dr. J. H. Mencké, of Bremen, informed me that, in examining the museum belonging to Professor Billi, superintendent of the Lying-in Institution at Milan, he had seen two pelvis, which not only resembled each other remarkably, but were so exactly like one in my possession which he had often examined, that he could not help asking Professor B. how long he had had one of these pelvis; for he could scarcely believe that it was not the same pelvis which he had seen a little time before at Heidelberg. Dr. M. has for several years cultivated midwifery with great zeal, has devoted a good deal of attention to deformities of the pelvis, and merits the title of a well-informed scientific practitioner.

Last year (1833) my son Franz Joseph met with a pelvis in the Pathological Museum at Vienna, which in every respect resembles those above described. It belonged to a woman who had died in labour from rupture of the uterus. The ossification of the sacro-iliac synchondrosis, and diminution of the lateral half of the sacrum, &c., are here on the right side; the sacrum itself consists of five vertebræ. The spot where the sacro-iliac synchondrosis is ossified is quite smooth anteriorly and inferiorly; superiorly there is a slightly elevated ridge, which marks the former place of the synchondrosis. The left oblique diameter of the brim measures 3" 2'', the right 4" 10''. My son also met with another pelvis of the same sort during the present year (1834) in the museum of the Hospice de la Maternité at Paris. It was a case which occurred in 1822; the patient was brought into the Maternité, after having been in labour already four days, and the liquor amnii escaped for forty-eight hours. She died undelivered during the operation of perforation. The following description of the pelvis (*fig. 4*) was taken from the examination which my son made of it, and also from a cast in plaster which he sent me. This pelvis was more twisted to one side than any of those which I have described. The ossification of the sacro-iliac synchondrosis is on the left side. The symphysis pubis is pushed over to the right, the sacrum to the left side, the left half of which latter bone is wasted. This defective formation of one side of the sacrum is more marked than in any of the pelvis above described; so much so, that the bodies of the upper sacral vertebræ pass directly into the left ilium, and at this spot, which feels perfectly smooth, no trace can be perceived of a former separation. The right oblique diameter of the brim measures 3" 1'', the left 5" 1''. The distance between the centre of the promontory and the anterior superior spinous process of the ilium on the right side, is 5" 4'', on the left 3'. The sacrum consists of three vertebræ; its anterior surface from

above downwards is slightly concave. The anterior sacral foramina on the left side are smaller than on the right. As far as one can judge from the two lumbar vertebræ which are still attached, the spine appears to have had a slight curvature to the right side, and the body of the last lumbar vertebra is somewhat lower on the right side than on the left.

The cases which I have here brought forward appear to confirm a remark which I made in 1811 in my *Erfahr. und Abhandl.*, viz. that deformity of the pelvis from a mutual approach of the promontory and bodies of the two ossa pubis, takes place more frequently on the left than on the right side.

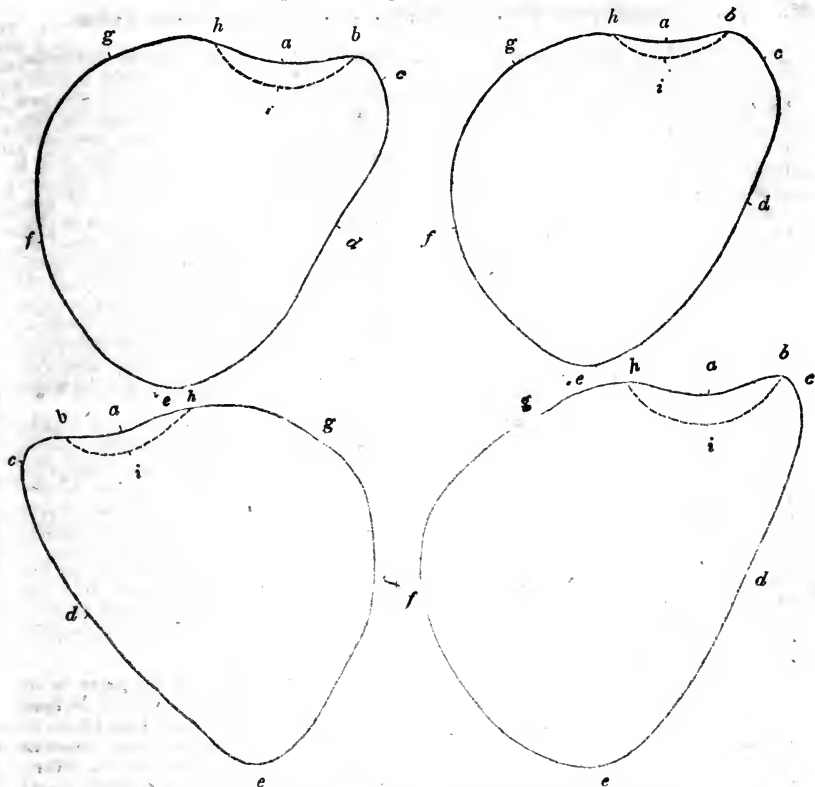
As to the origin: whether this malconformation and ossification of the sacro-iliac synchondrosis arises from some inflammatory process which had taken place in early life, the result of which had been the defective development of one side of the pelvis in this peculiar manner or degree, or whether any distortion of the spine at an early age, were the cause of this deformity, or whether it arose from some original defect of formation, &c., I am at present quite unable to say; further investigations are still required to ascertain this interesting point. It would be highly desirable that in the publishing of similar cases, as much as possible of the patient's previous history should be obtained, and that in examining the pelvis, attention should be also paid to the state of the spinal column.

The circumstance of not having been induced to pay much attention to this species of pelvic deformity until within the last seven years, in fact, until I met with a case myself, and not having had the opportunity of examining any large collection of preparations, and yet that nine cases should have come within my knowledge shows that it cannot be of great rarity. Whether Delpech, in his "Memor. des Hop. du Midi," alluded at all to this species, where he speaks of the frequency of oblique distortions of the pelvis, is difficult to say; but I have no doubt that the pelvis to which Dubois alludes in his Thesis for the Chair of Clinical Midwifery are of this species, as he had been informed of the fact by some of my own pupils, whom I had commissioned to make inquiries of him about pelvis of this sort, and to examine the collection at the Maternité. Moreover, if we recollect, in addition to the above remarks as to its frequency, that this peculiar species of mal-conformation may happen in persons who are otherwise perfectly well made, without a trace of rickets or osteo-malacia adult; and in cases where nothing had previously occurred which could produce any injury to the pelvis; when we recollect that the diagnosis of this deformity is rendered peculiarly difficult from the circumstance that examination per vaginam, or measuring the pelvis with Baudelocque's callipers, have little chance of giving a correct result; that no certain

diagnosis can be formed by external examination, especially where the patient is stout; when it is also recollected, that in all the cases which have come to my knowledge the lives of the mother and her child have been sacrificed; I am justified in saying that *it is a subject of the utmost importance in practice*, and deserves a place in our systems of midwifery as one of the causes of dystocia pelvica. No one can regret more sincerely than I do, not having been able to render these observations more full and complete; still I shall be glad if the little which I have now brought forwards will prove a means of inducing others, situated under more favourable circumstances for observation, to publish similar cases, and, if possible, to throw some light upon the origin of this deformity.

I look upon this paper merely as a short notice of the fact, and have therefore merely added outlines, showing the form of the pelvic entrance in certain cases. I intend to give this subject a much fuller consideration, and for this purpose have had the more remarkable pelvis drawn by an eminent artist. I shall collect whatever has been said on this subject by former authors, and shall feel greatly obliged to my professional brethren for the communication of any cases, remarks, &c., upon this subject.

Since the publication of this paper in the *Heidelberg Clinical Annals*, Prof. Naegelé has received a communication from Dr. D. D. Carlo Piantanida, Direttore dell' Ospedale maggiore, e dei Luoghi Pii uniti, at Milan, and Dr. Ambrose de Marchi Gherini, giving him a description of the pelvis mentioned by Dr. Mencké. Dr. Piantanida's description of one of the pelvis, which is in the Pathological Museum of the Ospicio de Sta Caterina alla ruota, marked 24, confirms the resemblance which Dr. Mencké observed to the pelvis described under Case 3, tab. 1, of the above paper, except that the Italian pelvis is a little more distorted. In the other case, which is marked 23, the peculiarities of this species of deformed pelvis (ossification of the sacro-iliac synchondrosis, defective development of one side of the sacrum, deformity of one of the ossa ilii, &c.) are on the *right* side; the left oblique diameter measures 2' 9", the right 5'. In both cases, the brim, from the ossified sacro-iliac synchondrosis, along the linea innominata, and behind the body and transverse ramus of the os pubis, forms nearly a straight line ("*descrive una linea quasi retta*"). Dr. Piantanida expressly mentions that the ossification of the sacro-iliac synchondrosis is complete in both cases.



Explanation of the Plates.—(The same letters serve for each.)

a b c d e f g h mark the form of the superior aperture of the Pelvis.

h i b The projection of the Promontory.

g The Sacro-iliac Synchondrosis.

c About the situation of the ossified Sacro-iliac Synchondrosis.

f d The vicinity of the union between the Ossa Ilii and Pubis.

e The Symphysis Pubis.

The coarse abuse with which the name of this justly celebrated accoucheur has been lately assailed by an English journal, is not a little derogatory to the character of the English medical public. Besides no slight ignorance of the subject, the author of the aforesaid abuse against Professor Naegelé has shown a singular want of judgment in venturing to rest his crude and incorrect grounds for vituperation on the fallacious medium of a French translation. If he had possessed even a moderate knowledge of the real nature of the case to which Professor Naegelé alluded, he would have found no lack of interesting materials; but, ignorant of what has been written on this subject in Germany and Holland during the last few years, he has ventured to accuse a distinguished individual of bad practice, before he himself was competent to form an opinion.

Not in pity, then, to him, but from a feeling of shame that the journals of my country

should go forth to the world with such exposures of ignorance, I beg to refer him to a case published in the *Medical Gazette*, for January 10, 1829, at the request of Professor Naegelé, by my friend Dr. Merriman, and also to a similar case, in the *Medical Gazette* for May 31, 1834, among my midwifery hospital reports.—E. R.

Reviews.

The Constitution of Man considered in relation to External Objects. By GEORGE CÔMBRE. pp. 440. Anderson. (HENDERSON EDITION.) 1835.

“The proper study of mankind is man.”

Of all the phenomena which can occupy the mind of the philosopher, there is not one so pre-eminent, not one which claims that high

interest in an equal degree to the present. Whether the subject be viewed in the abstract or in the manifold relations it has to health, to the comforts of social life, to the commerce between man and man, and to his future destiny, every other consideration sinks into the shade. The poet has appreciated its momentousness, the theologian has depicted it in glowing, but too often in darkened, colours, the gloomy mind has enshrouded it in dark and melancholic reflections, the pedant indulged in his satires on man, and the atheist endeavoured to cloud the "highest interests" of our being, and to envelop us in one impenetrable gloom. In the closet we are philanthropists or misanthropists, depending on our peculiar mood, or on our particular circumstances; now a declaimer against the structure of our minds, now in acclamation of their exaltation. But after all, after the flippant has expended his twice-told tale, and has ceased his impertinence, after the casuist has delivered his doubts, and the sophist has suppressed his revilings, to the identical conclusion all arrive,—let us have the greatest sum of happiness for the greatest number of individuals. How such a consummation is to be attained, affords a problem which, to solve in a rational manner, offers a theme for a million of minds, if, shall we say, cast in a million of moulds. We are not casuists, sophists, or deists—assuredly not atheists—but feel incompetent to solve the problem; its very momentousness overwhelms us; yet we forget not the principle affirmed, affirmed before, by the majesty of nations.

Such a work as the one before us affords us great delight. The notice which incited to the present edition of this book, already too little known, is one to which every individual will accord his approbation. The presentation of it in this particular form is dependent upon a liberal bequest of the late W. R. Henderson, Esq., younger, of Warriston and Eildon Hall, leaving in his deed of settlement, after paying certain annuities, &c., a sum of money for the execution of a production like the present, naming, however, the eminent and intelligent author, and the production before us, the testator's object being that knowledge be diffused in a cheap form through the people.

Despite all the objections that have been advanced against the truth of phrenology, despite the terse revilings of Jeffrey, and all polemical discussions that have occurred, we have here one of its applications to a purpose which the veriest sceptic or opponent could not do otherwise than applaud.

If phrenology have achieved no more for the public weal than being an incitant to productions such as this, which shall diffuse philosophy, unadorned with parade; theology, unfettered by prejudice; it would have been a sufficient guarantee for its promulgation.

Mr. Combe is not a profound thinker; his

inductions are not so rigorously exact as we should wish to meet with in works of this character; but he is obviously a man of observation, and one who can collect facts. As, however, this book is not strictly medical, but embraces the whole scope of philosophy, metaphysical as well as natural, and the major part being metaphysical, we shall not enter into any lengthened account of its contents. Its great object is to prove the harmony subsisting between all the works of nature; the importance of attending to organic laws, as influencing natural ones; the analogy existing between natural laws and vital; and to show the striking analogy in their operations, and the close dependencies they have upon each other;—a work, it must be confessed, almost superhuman. For us to demonstrate the performance of Mr. Combe, be it bad or good, would require a very long disquisition—would extend further than our limits will permit. We will, however, give a few isolated parts as fair specimens of the whole. The following are the contents of the book:—

“General View of the Constitution of Human Nature, and its relations to External Objects—On Natural Laws—On the Constitution of Man, and its relations to External Objects—On the Sources of Human Happiness, and the Conditions requisite for maintaining it—Application of the Natural Laws to the Practical Arrangements of Life—To what extent are the Miseries of Mankind referable to Infringements of the Laws of Nature?—On Punishment—On the combined Operation of the Natural Laws—Influence of the Natural Laws on the Happiness of Individuals—On the relation between Science and Scripture—Conclusion.—APPENDIX. Natural Laws—Organic Laws—Hereditary Transmission of Qualities—Laws relative to Marriage and Education in Germany—Death—Infringement of the Moral Laws.”

At page 128 are enumerated some of the calamities arising from the infringements of natural laws.

And after quoting some passages from Voltaire on the characters of the Apii and the Catos, in which are some eloquent and pithy remarks on the hereditary qualities of individuals, he observes, “Phrenology reveals the principle on which these phenomena take place. Mental talents and dispositions are determined by the size and constitution of the brain. The brain is a portion of our organized system, and, as such, is subject to the organic laws, by one of which its qualities are transmitted by hereditary descent. This law, however faint or obscure it may appear in individual cases, becomes absolutely undeniable in nations. When we place the collection of Hindoo, Carib, Negro, New Holland, North American, and European skulls, possessed by the Phrenological Society, in juxtaposition, we perceive a national form and combination of organs in each actually obtruding itself upon our notice, and corresponding with the mental characters of the

respective tribes; the cerebral development of one tribe is seen to differ as widely from that of another, as the European mind does from that of the New Hollander. Here, then, each Hindoo, Chinese, New Hollander, Negro, and Carib, obviously inherits from his parents a certain general type of head; and so does each European. If, then, the general forms and proportions are thus so palpably transmitted, can we doubt that the individual varieties follow the same rule, modified slightly by causes peculiar to the parents of the individual? The differences of national character are equally conspicuous as those of national brains, and it is surprising how permanently both endure."

These extracts afford a fair proof of the value of the book; and yet, to admit a paradox, they are no proof whatever. They are but stones taken from the walls of a building erected of the same material. It is an exceedingly valuable book; one which will have, we do not doubt, a more extensive sale than any work published at the present day. It is amply deserving of such a diffusion; not only from the very remarkable cheapness, but from the immense quantity of interesting matter it contains. The price would but pay for the paper, and the matter is worth ten times the price.

Principles of the Treatment of Gout, with a further Examination of the effects of Colchicum as a Remedy; and some Observations on the Use of Veratria in that Disease.
By Sir CHAS. SCUDAMORE, M.D., F.R.S.
Longman. 1835.

The author of the present pamphlet has been respectably known to the profession as a writer on gout for the last twenty years. His works have not altered materially the mode of its treatment, but they have, unquestionably, been the means of directing the attention of practitioners to more correct views of its origin—to the causes which induce it—than had been previously done.

Gout, it may be said, is connected with, nay, closely allied to, disorder of the digestive apparatus. Gout is clearly hereditary, in proof of which ample testimony can be adduced. But does it ever make its appearance without some obvious exciting cause?—probably not. The alderman, the pampered citizen, the epicure of course, and the indolent, are the victims of its ravages.

What is the nature of the affection? No one has ever answered the question satisfactorily: it is an affection *sui generis*; Sir C. Scudamore says it is. What is its nature—what its essence? Is it inflammation of one or more of the structures of the joints? of the skin? of the fibrous structures surrounding the joints, ligaments, aponeuroses, or tendons? of the synovial membranes, cartilages, or the bones? We do not know. It is better to confess ignorance than offer an opinion which has no other basis than conjecture. The treatment

which our author recommends, and upon which from an extensive experience he must be able to give information, shall suffice for the review.

Of Bleeding.—General bleeding is never to be thought of as a remedy for the local inflammation, which it does not tend to relieve as it does common inflammation; when that is connected with increased action of the heart and arteries. It was considered, formerly, that bleeding in part was improper, but this is an exploded error. If any important viscus be inflamed, whether in accidental connexion with the paroxysm, or otherwise; also if there be symptoms of congestion in any organ—in the brain more especially—blood should be taken away; also in general plethora, in conjunction with a strong pulse, bleeding may be practised with a view to lessen the quantity of the circulating blood. This method of practice is to be distinguished from the use of bleeding as a remedy for the gout in the extremities, which it would rarely tend to remove.

Local bleeding by leeches is not successful; it is often disadvantageous, and occasionally even injurious in acute gout, rather aggravating than relieving the pain. In some cases of chronic gout benefit arises from the application of leeches.

Of Emetics.—Sir Charles entertains a higher opinion than formerly of the advantages of producing free vomiting, and especially at the commencement of a severe attack. Unless there are peculiar contra-indications, he recommends this as one of the first measures to be adopted, particularly when the stomach is disordered, as it frequently happens. The operation of an emetic has caused immediate subsidence of gouty symptoms, and has occasionally succeeded in arresting a threatened paroxysm.

Of Cathartics.—When it is considered how almost wholly a fit of gout appears to result from congestion in the abdominal viscera, more especially from a surcharge in the circulation of the vena portarum, and of the biliary pores, we are at once led by theory to the choice of this class of remedies, and no less confirmed in its propriety by practice. If the alvine discharges exhibit an unnatural character, whether as to darkness of colour, which marks a vitiated state of the biliary secretion, or if, on the contrary, the appearance be that of clay, or of a leaden hue, proving torpor of the liver, the bowels must be acted on freely. The mercurial purgative is the best, by stimulating the excretory ducts of the liver. A combination of calomel and colocynth agrees with most persons, and a small dose of James's powder is often useful. With some, however, the pil. hydrarg. or pil. hyd. submur. compos. will agree better than calomel. It is better to administer the mercurial dose at night, diuretics and purgatives in the morning.

The employment of diuretics is also useful, such as the carbonate of potash, joined with the spirit of nitric ether and compound spirit

of juniper, to obviate the dense state of the urine, its deep colour, and the remarkable quantity of brick dust, or pinkish sediment, which sooner or later in the paroxysm it deposits on cooling.

The author has witnessed the most inconvenient consequences arise from the excessive action of mercury, with an aggravation instead of relief of all the gouty symptoms; he therefore advises that due care should be observed not to produce salivation, or go beyond just making the gums sensible of its influence in any case, and, in general, not to this amount.

Sudorifics.—During the course of acute gout, it is highly desirable that the functions of the skin should be duly performed; and when there is heat of surface, we should endeavour to procure free perspiration at intervals, and especially in the night; for in the day-time, when it is our still more important object to maintain a full action of the bowels, the action of sudorifics would be incompatible. Of this class of medicines tartarised antimony in combination with salines and Dover's powder is to be preferred.

Narcotics.—The author is a decided advocate for such employment of opiates as may be found necessary for the mitigation of pain, and the procuring of sleep at night. The preparations of opium appear to have the best effect.

Colchicum.—Sir Charles observes upon this remedy—"I am anxious, after many years' study, and observation of its properties and effects, to record my confirmed opinion. Its great value as a medicine is unquestionable; but I cannot hesitate to declare, that, in the injudicious manner in which it is popularly employed, it carries with it much more of bane than antidote."

He recapitulates the leading points on the virtues of colchicum in gout in the following words:—

"I now hear the question repeated, what final opinion is to be delivered to the gouty patient on the subject of colchicum? Is it to be taken from him altogether as a remedy for his sufferings, on the score of prudence? I answer, certainly not. I conceive, that, in the way of general instruction, the following positions may be laid down. Some of my former observations I must recapitulate. Inasmuch as the acetum colchici is very greatly the mildest form of the medicine, it is desirable to obtain from it, in combination with a saline aperient, those palliative effects which are to be expected from colchicum. When any nausea or inconvenience is experienced from the fluid form of the medicine, it may be given with advantage in the form of pill, the extract being used for this purpose, and other suitable medicine being joined with its use.

"Some individuals, it is true, derive every satisfaction from using the wine of colchicum, taking a moderate dose at bed-time, for two or three nights, and paying due attention to the functions of the liver, bowels, &c., by

means of other medicines. When gout not only readily yields to such treatment, but also does not return in a short time, I do not wish to offer any objection to this plan of treatment, much as I give the preference to my own method of using the acetum. As there is no general rule without its exception, so I may here remark, that circumstances may arise in which I should be disposed to give the wine; for example, when it may be necessary to avoid all excitement to the bowels, and when, at the same time, it is desirable to make the quickest impression on the gouty action and irritation.

"From all which I have stated, the reader will at once perceive, that I allow colchicum the claim of possessing a greater power in relieving the immediate symptoms of gout, than any other medicine which we obtain from the materia medica. This, however, is too commonly found to be only a palliative power; because it is not unfrequently seen that the paroxysm returns the sooner, in the direct ratio in which it is employed.

"In the manner in which I recommend the use of the acetum, the evil in question never follows in the same degree; and, generally speaking, the reproach is not at all deserved, because I employ it always in combination with alteratives, aperients, and other medicines, and desire to consider it as the auxiliary rather than the substantial remedy.

"The gouty paroxysm depends upon internal errors of the system, for which colchicum is not in any of its forms the remedy; and were it not that its palliative influence is so superior to that of any other medicine, I would never employ it in the treatment of gout. I would always prefer to remove the fit by other medicines, if I could succeed in a reasonable time; not because I view the judicious employment of colchicum as in any degree unsafe, but that I should expect the cure to be more lasting when its use can be omitted. Not only, indeed, does the gout return so much the sooner, and indeed with lamentable frequency, from the injudicious way in which colchicum is so commonly used, but, as I have already shown, the constitution becomes injured; this injury is manifested in various ways. Most commonly the mucous membrane of the stomach and intestinal canal suffers chronic irritation. The appetite and digestive functions are impaired; the patient loses flesh and strength; and the whole appearance alters. I have related examples of a fatal result. In other cases, the patient does not complain of loss of appetite, or indigestion, but still he loses flesh and strength, and fails in nervous energy. The medicine is exerting its unfavourable influence on the nervous system; and, according to my observation, materially impairs the functions of the liver."

In conclusion are the observations of our author upon veratria in gout. He confesses himself indebted to Dr. Turnbull for his know-

ledge of this remedy, and states that he has watched the operation of the veratria ointment, and is led to the conclusion, that no beneficial effects result from its application until the state of the constitution which gave rise to gout has been corrected by other measures. He objects to the employment of local treatment so early, especially in the form of friction, as recommended by Dr. Turnbull. When the acute symptoms have subsided, the veratria liniment he regards as a good application. He narrates five cases in which veratria was employed; he regards it "to be entirely a local remedy," producing no unpleasant constitutional symptoms, and its application affording pleasure to the patient.

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 11th, 1835.

PROFESSOR BURNETT, President, in the Chair.

DR. JOHNSON commenced the discussions, by detailing the case of a female patient, who was labouring under an extreme susceptibility of two of the senses, viz. sight and hearing; and, in order that no noise might be conveyed to the apartment, every avenue leading to the house was thickly strewed with straw, and every door was muffled, and every crevice capable of admitting the rays of light was carefully closed, by which means total darkness and silence reigned in the patient's apartment. The other senses are not affected. She can take mild nourishing food, without creating any disturbance; but all medicines produce an increase of her sufferings: even a few grains of rhubarb considerably added to them; but although she enjoys but little sleep, opiates are of no avail. The present attack has lasted six weeks, an interval of three months having elapsed since the first: both were produced by moral causes. In the former attack a degree of mental aberration existed, this phenomenon, however, has not manifested itself again.

Mr. Queade enquired if the functions of the stomach were well performed, and also in what state the different secretions were?

Dr. Johnson replied, that the bowels were rather torpid, as is usually the case when little food is taken; the other secretions were natural; her pulse was quiet; her tongue was moist; and the catamenia was regular. She was of temperate habits, and, when well, took horse exercise. He considered the case to be one of those multifarious forms of hysteria that the disease is capable of assuming.

The Doctor then drew the attention of the society to cases of a more practical nature, or at least as opening a more fertile field for discussion, than had come under his observation during the last few days, and which he be-

lieved were pretty prevalent just at this time viz. inflammation attacking the caput coli. Three cases were detailed, two of which proved fatal.

In the 1st case, a female, who had attended divine service on Sunday, after her return home was suddenly seized with pain at the situation of the caput coli; purgatives were administered, and early on Wednesday morning a copious evacuation of feculent matter from the bowels occurred, and afterwards the pain gradually increased, and the abdomen became gradually distended (ballonné).

In the second case, six or seven days had elapsed before any evacuation from the bowels could be solicited by the usual means, accompanied with agonising pain. When called in, he immediately prescribed general bleeding, local bleeding with leeches, and calomel and opium, so as to produce salivation, when copious stools followed, succeeded by recovery.

In the 3rd case, inflammation and obstruction at the caput coli were found on examination after death.

Dr. Johnson remarked, that in these inflammatory cases, if consulted early, and if the patients did not labour under any other causes that might tend to shorten or prove hazardous to life, his prognosis would be favourable, and the treatment that he would recommend from experience, should consist of active bleeding at the commencement of the attack, followed by calomel and opium, and the judicious use of laxatives.

Mr. Morris begged to know if any induration existed.

The answer was in the affirmative; and, in confirmation of the pathological change, the death and morbid appearances of the celebrated traveller Ballazoni were adduced, who died in this metropolis about eleven years ago. He remained seventeen days without any evacuations from the bowels being procured. Ballazoni had suffered severely from a similar attack while in Egypt. On opening the body, it was found that the obstruction had been occasioned by an internal hernia, which was formed in the following manner:—A blind pouch had been produced by two convolutions of intestines, that had become glued together through the result of a previous inflammatory process, into which aperture a knuckle of intestine had become strangulated, causing the impenetrable barrier to the passage of the contents of the canal.

The President solicited the attention of the members to the immense mass of speculative and practical matter that was now before them, trusting it would not fail to give rise to many valuable deductions. The case of hysteria, he said, vividly brought to his recollection that of a poor sufferer who had not spoken for upwards of two years and a half; but her sense of smell was so acute, that she was conscious of the approach of any food at a distance of two or more flights of stairs; and if even a grape was placed on the floor, or any other

part of the room, she would dart her fingers instantly on it, guided by no other sense, unless she could see through her eyelids.

Mr. Burnell then requested to know whether the inflammation attacking the caput cæcum coli in the cases now before the society, was referable to any indigestible matter lodged in the part, as he recollected cases, and one in particular, that died in St. Bartholomew's Hospital, where the mischief was found to arise from the detention of a considerable mass of mustard seed.

Dr. Johnson replied, that he had frequently observed it to be the case during the mania for taking that remedy, and that he had known fruits that must have been swallowed for some months retained; and that indigestible substances will remain in the cells of the colon for an unlimited time, keeping up immense irritation. In the cases that he had laid before the Society, he was not aware that these causes existed.

Dr. Webster, in corroboration of the last facts, briefly detailed a case (the minute particulars of which he could not recal to his recollection, having come under his notice some months back); the symptoms, however, he said, were vague, but they entirely subsided after the patient vomited up a bit of an eel that had remained in the stomach for six weeks unchanged.

Mr. Elwyn mentioned the case of a patient that had been received into the Middlesex Hospital, who, from an imbecile state of mind, was in the habit of swallowing raw carrots, cabbage stalks, and large pieces of orange peel: these produced considerable irritations, giving rise to loud hysterical screamings. He was treated by purgatives.

Several members at this stage of the discussion deprecated the use of strong purgatives, attributing intro-susceptions as arising entirely from their use, not duly taking into consideration the condition of the alimentary canal, so much so, that we began to be fearful that purgative medicines would be branded as little deserving of our notice.

A gentleman (whose name we were unacquainted with) argued, very rightly, that imaginations were very frequently produced through inanition.

Dr. Johnson, to prevent further misconception, either from what he might have offered himself, or what had fallen from different speakers, respecting purgatives, explained that indigestible substances set up an irritation at a certain spot of the alimentary canal, the tube contracts on that matter, and its circumference becomes smaller, and if active peristaltic action is induced, the contracted portion is forced down into a wider part below, and if drastic purgatives be administered in this condition, they cannot fail to aggravate the mischief.

Mr. Stretor considered that if a permanent pain existed in any portion of the intestinal tube, that he had found it far more advisable

to exhibit first two or three grains of calomel, followed by a free venesection, and then the aperient would be found to seldom fail to produce beneficial results.

At the adjournment, the President announced that there would be no meeting on the following Saturday evening, owing to Good Friday, it being customary to postpone attendance until the ensuing Saturday, which would be the last for this session. The amended laws of the Society were distributed to the members.

LONDON MEDICAL SOCIETY.

Monday, April 13th, 1835.

DR. WHITING in the Chair.

Ovarian Dropsy—Use of Iodine—Excision.

The subject of ovarian dropsy was resumed this evening, the discussion being chiefly directed to the employment of iodine in its treatment.

A case of ovarian disease was narrated by Mr. Kingdon, in which iodine was successfully employed, both internally and externally. From the immense size of the tumour, and its extent upwards, it was by many considered to be of hepatic origin, and, under that impression, the mercurial ointment was first employed, but unavailingly. The external application of iodine was then had recourse to, in the form of iodine, ℥j to an ounce of unguent. cetacei; the tincture was soon afterwards given in the dose of four drops three times a-day; a drachm of the ointment was rubbed in during the course of the four-and-twenty hours. Under this treatment the tumour gradually diminished, and a nucleus only was left; the general health also improving very materially.

Rather a curious fact was narrated in regard to this case; the patient had formerly suffered from hernia on the right side, which had not shown itself while the abdominal muscles were stretched by the enormous tumour which occupied the abdominal cavity, but as soon as this was diminished under the action of iodine, the rupture again appeared. Two other cases were alluded to in which benefit was derived from its use; but each patient, while under its influence, became the subject of inflammation of the womb. This was attributed by the narrator either to want of proper attention on the part of the patient, or to a peculiar predisposition to inflammation being induced by the administration of the iodine, and most especially in the diseased organs.

The experience of the Society appeared to be in favour of the use of iodine, even in the treatment of the disease under notice; it was unequivocally expressed in regard to its beneficial application in removing many other complaints. Cases were, however, mentioned where it proved injurious, and in some it seemed to cause a fatal termination. A case of enormous bronchocele was alluded to, in

which it reduced the swelling one third, but such severe irritative fever set in, that the patient sunk. Her medical attendant attributed the supervention of the fever to the iodine. It was also stated that Sir B. C. Brodie lost three patients during the past year from the injurious effects of iodine. A stranger to the Society remarked that the foreign physicians were exceedingly cautious in their employment of iodine, and seldom used it, except externally; he named Coindet, of Geneva (the original introducer into practice of this therapeutic agent), and Dr. Todd, of Rome. His statement, as far as regards Dr. Coindet, was at once contradicted by Dr. Johnson, who added, that he gave larger doses of the tincture than Mr. Kingdon, but that he considered an external application, consisting of iodine, hydriodate of potash, spermæti ointment, and the mercurial ointment, to be preferable. This he had found very beneficial, and he narrated a case of ascites, which he had successfully treated, in proof of his assertion. The patient, a merchant from Aberdeen, had been twice tapped, and was to have been operated on a third time, but on the day when it was to be done, he was so very weak, and the distension was so great, that it was feared he would die upon the table. He was therefore removed, and the ointment already alluded to prescribed. In the course of a short time great diuresis ensued, and the fluid contained in the abdomen was gradually absorbed; at the same time, an enlargement of the liver and spleen, which was present, subsided. The patient completely recovered, married, and had three children afterwards; the Doctor heard from him lately, and was informed that he enjoyed excellent health.

The question concerning extirpation of an ovarian tumour was resumed this evening in the course of the discussion, and we are bound in justice to say, that the opinion of the Society was expressed most forcibly, both against it, and also against the injection of the sac. The only argument that could be urged in favour of the former proceeding was, that occasionally the tumour has not any abnormal attachments, and may be readily turned out of the cavity of the abdomen; and it was argued that this condition might be ascertained to exist previous to excision, by the perfect rotation of the tumour; but, be it remembered, that in one of the operations at Edinburgh this condition of the enlarged ovary was supposed to exist, yet on laying open the abdomen the most extensive adhesions were found. It was mentioned, that of the six cases which occurred in the northern metropolis, and one which had been operated on in this, only one had survived, and even in that one the patient did not recover entirely, inasmuch as there were several tumours remaining in the abdomen, which were in all probability connected with the ovaries.

During the course of the evening, an intermediate discussion, or rather conversation,

took place between some of the members, on the subject of hepatic tumour, in the early part of the evening, and, later, on the comparative vitality of the ovarian cyst and peritoneal coat.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 14th, 1835.

HENRY EARLE, Esq. F. R. S., President, in the Chair.

This evening was read from the President a paper, entitled, "Some Observations on Fractures* of the Bones of the Pelvis," highly valuable and practical, evidently the result of no small attention to the important, but, it must be confessed, hitherto neglected subject. The author commenced by observing, that the greatest mischief to be dreaded from fractures of the bones of the pelvis, was the injury the important viscera contained within the cavity usually sustained; and these were generally caused by heavy weights passing over the pelvis, or falls received from considerable heights. The President was induced to offer to the Society the observations he had made on fractures of the bones of the pelvis, owing to writers not having treated of the symptoms by which he was enabled to arrive at a correct diagnosis, verified by post mortem appearances; death having occurred at distant periods from the receipt of the accidents, and not occasioned by the injury; or the symptoms had been confounded by writers with other fractures.

Two cases were detailed in confirmation.

CASE I.—A patient fell from a height of thirty feet, on his left side. The limb of the affected side was found not shortened, but was everted: pressure and rotating the leg caused uneasiness about the pelvis, and deep seated pain was felt in the hip joint, with injury of the urethra, as discoverable by the introduction of the catheter. The patient was discharged from the Hospital eight weeks after the receipt of the injury, and could walk almost as well as before the accident. Some time after, this patient fell under the care of Mr. Howship, and died of another affection. On examining the pelvis, three fractures were discovered; one through the ilium, a second of the pubis, and a third across the acetabulum in two directions—the outer surface of the ilium was considerably thickened with a deposition of ossific matter. The author was indebted to Mr. H. for the preparation (it was passed round to the members).

CASE II.—A robust-looking man, aged 44 years, was received into St. Bartholomew's Hospital in the month of August, 1834. On admission, stated he fell from a height of 16

* The Secretary included dislocations, but this, we suspect, originated from the habit he has acquired, from the terms fractures and dislocations frequently coming one after the other, as no allusion was made in the paper to them.

feet on his left side, hip, and elbow-joint: the inferior extremity of the same side was found uninjured. On examination, fracture of the crest of the ilium was easily detected, and the whole limb could be moved in every direction with facility. On comparing the two trochanters, the one on the injured side was found not so prominent, nor could it be so easily felt as the other; there was no shortening of the leg, but there was slight eversion, with compound fracture of the olecranon: on the last important point all writers have been silent. From the successful termination of the cases which he had treated, the author strongly inculcated as a practical rule, in the first instance, the early application of leeches and strict anti-phlogistic treatment, with strict attention to the patient's being kept perfectly quiet, and in one position; which might be easily effected by the use of his bed, with flexion of the limbs at right angles. Afterwards the author adduced other cases of complicated injury to the pelvis, the heads of which we give, fully convinced they will prove as acceptable to our readers, as they were to the members and visitors who were present.

CASE III.—A gentleman, aged 60 years, while riding a restive horse, was suddenly thrown forward on the withers, and received considerable injury. The author was sent for, and, when he arrived, he found the patient lying on a bed, faint and exhausted, and on examination blood was perceived flowing from the anus, with fracture of the bones of the pubis, and laceration of the urethra. On introducing the catheter, it was ascertained that it did not pass into the bladder, but into a large sinus, containing a bloody effusion; the patient did not survive the accident. At the post-mortem, the symphysis pubis was found greatly separated, and the prostate gland was seen lying loose in the sinus. In this case a most important feature in physiology was established, as heretofore supposed by anatomists, viz. that the mucous membrane covering the trigone lutea possesses great sensitiveness, and when touched by the catheter, a distressing urgency is experienced to make water (as in this instance), whether the bladder contains any urine or not, and the same phenomenon takes place when a calculus comes in contact with the membrane.

CASE IV.—This case presented fracture of the pubic and ischiatic bones, rupture of the urethra close to Cowper's glands, with effusion of blood into the cavity of the pelvis.

CASE V.—This case was equally interesting and important.

The author, at the conclusion of his valuable paper, forcibly drew the attention of the profession to the great necessity of paying instant attention to the bladder, so as to remedy the fatal consequences that will be found invariably to occur from effusion of urine, which exhibits one of the most dangerous symptoms likely to result from these accidents, and which, by timely interference, may be

remedied, and occasionally greatly enhanced, by making a free incision, and the relative condition of the two trochanters, which would be found highly valuable in arriving at a correct and conclusive diagnosis.

After the completion of the paper, the author related another case in corroboration of the above facts, which had occurred since these were committed to writing, this, and the interesting case related by Mr. Macilwain, with remarks offered by Mr. Hawkins, of St. George's, Mr. Thompson, of the Westminster, and Mr. Arnot, of the Middlesex, Hospitals, we have not time to add, nor the list of books presented since the last meeting. At the next, it was announced that Dr. Simms would read a paper "On Serous Apoplexy," which would take place on the 28th of this month.

THE

London Medical and Surgical Journal.

Saturday, April 14, 1835.

THE BODY OF A CHILD EXHUMED
FOR THE PURPOSE OF A CORONER'S INQUEST—CURIOUS CASE.

It has often been our lot, as medical journalists, to advert with pain to the spirit of ungenerous rivalry and petty jealousy which, in too many instances, actuate some of our professional brethren. The feuds and mutual ill-will which are the certain fruits of illiberal dealing between the members of the medical community, continually come under our observation, and render us sceptical that, until their general as well as professional education is more equalised, harmony can reign among them. The case we are about to relate adds one more to the already innumerable bickerings and heart-burnings which already exist, where sentiments of a very opposite description ought alone to be found. The evidence on this curious case is now before us, and from it we lay before our readers the following as its leading features. The scene is in Dublin, and occurred so long back as the 1st instant.

A most respectable jury, twenty-three in number, was empannelled, and the novelty of the inquiry excited much interest

among the medical portion of the community, whose interests were so much concerned in the result. Two coroners, Messrs. Paisley and M'Carthy, the latter an apothecary, presided. The jury having been sworn proceeded to the burial ground to view the body of the exhumed infant.

It appears that the first witness, and father of the child in question, named Bernard Finn, had not desired this investigation; *had no notion of such a thing*. He stated that Mrs. Goolding, a midwife, came to his wife, who was in labour, on Monday, very early on Tuesday, 10th March last (it appeared afterwards that Mrs. Goolding had a regular diploma in midwifery, and is step-daughter to the late Surgeon Adrian). Mrs. G. considered his wife in great danger, and Surgeon Hayden was called in on the Thursday following; the labour pains had then ceased. This gentleman directed a medicine to bring on the labour, and acted with great kindness. Finn further attested that his wife had always slow or difficult labours; the last was her fourth child. Her first was born dead after a very difficult labour, but two children had been born alive under the care of Mrs. Goolding. This witness went on to say that Surgeon Hayden pronouncing this to be a very difficult case, said, that instruments would be required, on his first visit, and sent him (Finn) to get some ergot of rye, at Bishop-street Hospital, saying, that as this was so important a case, and he had often been disappointed, owing to the medicine being inert, he should send for it where he *knew*, from repeated trials, it could be obtained effective, at the same time he did not say that it *might* not be equally good at Mr. Buckley's, but that in the former instance he was certain of its efficacy.

On the second visit, after the trial of an

instrument to save the child's life, Surgeon Hayden declared that, even if the child were alive, it would be necessary to sacrifice it to save the life of the mother. Finn did not at first consent to the operation, but after the lapse of an hour and a half consented. During this period the Doctor required a consultation, and, according to Finn, did all that a skilful and humane practitioner could do in such an emergency; he urged the extreme danger of delay in the exhausted state of the woman, who herself was anxious that the operation should be performed, and reproached her husband with cruelty in preventing an operation which would save her life. She expressed herself satisfied that the child was already dead. Finn, however, prevailed upon the Doctor to give another dose of the medicine, which his wife reluctantly swallowed. He afterwards gave full permission to do whatever was necessary to save the life of the mother.

On Mr. M'Donough's rising to cross-examine this witness, Mr. M'Carthy, the coroner, apothecary, and brother-in-law of Mr. Buckley, whose *shop* was not resorted to for the ergot of rye, objected in the strongest terms to the examination of witnesses by counsel, and said he *remembered* a multitude of authorities in his favour, *but* he could *not* think of them *just now*. He quoted some *Latin*, to the no small amusement of the auditory.

Mr. M'Donough persisted, and instanced the Rathcormac inquest, in which counsel were employed on both sides.

Mr. M'Carthy was equally obstinate, but the counsel prevailed, owing to the senior coroner affirming that if Mr. M'Donough was not heard, he would appoint him his assessor, in which capacity he should be heard.

Little was elicited from the cross-exa-

mination of Finn. He confirmed what is already related, with the addition that "after four days' labour, the midwife told him it was necessary to have a doctor; that Mr. Hayden and his pupils were very kind; that vigorous labour pains set in after taking the ergot, but the labour did not advance. His wife called him (Finn) a brute, or "thereabouts," for not consenting to the operation. Had often expressed his gratitude to Mr. Hayden for his care, and bore him no malice.

The coroner, Mr. Paisley, now asked the witness, "was it his wish that the inquest should have been held?" He answered *emphatically*, "No; it was not; and he hoped Mr. Hayden did not lay the blame upon him"—(cheers).

Mr. Hayden upon this declared he would institute a suit in the Court of King's Bench against the instigators of this foul conspiracy.

Upon Finn answering a question put by the counsel "that Mr. Buckley was now in attendance upon Mrs. Finn, Mr. Buckley interrupted the witness, and received for his pains the hissing and groaning of some hundred and fifty individuals, which caused a suspension of the examination for some time; upon its resumption, Finn said he told Buckley that the ergot was got at the hospital, but Buckley took no "hault" of that; upon which one of the counsel observed, "Oh, no; he is a 'nice man.' He took no hault, he had only a stone in his sleeve"—(much laughter). Not a word was said about the inquest until Buckley was told of the medicine. Buckley, or his shopman, brought Finn over from his own house to introduce him to Mr. Paisley, whom he represented as a policeman—(much laughter). Buckley had said that he got a summons from Mr. Paisley.

Mr. Paisley, with great warmth—"I

never issued a summons in this affair, and I call upon you, Buckley, if you dare, to produce a certain note connected with this affair."

After a slight cross-examination of Finn by Buckley, which elicited nothing in his favour, Mr. McDonough appealed to him (Finn) and asked whether he thought Mr. Hayden fairly dealt with? Whether, because, owing to his obstinacy, he had postponed an operation to save his wife's life in the very jaws of death, he (Mr. H.) should be dragged before the public under the present imputation? The witness seemed deeply impressed with the consciousness that the inquiry ought never to have been instituted.

The substance of the evidence of the second witness, Mrs. Harriet Gooding, went to prove what has already been stated, and also that the labour pains had ceased on Thursday morning, at 2 o'clock A.M.; abdomen tender on the slightest pressure; pulse upwards of 130; patient exhausted; would take no nourishment for the last two days. Head of the child presented, and was in the upper opening of the pelvis, which she considered distorted. Opening the head, in order to diminish its size by extracting the brain, was absolutely necessary, as the head was too large to pass; the forceps had been tried; delirium had set in. Mr. Hayden required a consultation, and offered to meet any medical man Finn might please to call in; never saw so difficult a case during her practice for fifteen years. She added that the operation was performed with skill and dexterity, but not before the patient was sinking, and in momentary danger of death. Believed that the child was dead before that, owing to the long continued pressure, the woman having been in labour four days before the Doctor saw her.

Surgeon Hayden observed, he directed the ergot of rye that all means should get a fair trial, and as instrumental delivery was indispensable, the renewed uterine action would assist in the delivery. The extraction of the child was effected by means of the craniotomy forceps. In answer to a question by Mr. M'Carthy, "never saw a case where there was so much sinking rally so that the child would be born by the natural efforts."

Surgeon Custis (accoucheur) sworn:—examined the body of the child the subject of the inquest; it was the largest infant he ever saw. Mr. M'Carthy said he saw *one case* where the patient rose after sinking. Mrs. Goolding never did. Mr. M'Carthy, however, had not felt the pulse of his *sinking patient*!! Dr. Ireland, in thirty years' practice, had never seen such a case; would have done precisely as Mr. Hayden did. The latter demonstrated the necessity of the operation to the full satisfaction of the jury, by a reference to a female pelvis and the skull of an infant. After citing many authorities in support of the mode he had pursued Mr. Hayden pointed out to the jury his experience in obstetric surgery, which he proved to be very considerable, owing to his being attendant on an institution for lying-in women. He added, in conclusion, that this hospital depended for support on voluntary subscriptions, an annual charity sermon, and the profits of a *medical establishment*, auxiliary to the institution, and that, on *this account*, "the invidious and diabolical inquiry now before the jury was set on foot."

We have given so much of the details of the inquest, that we have no room left in our present number for any comments, we shall, therefore, after giving the verdict of the twenty-three jurors, leave our readers to form their own opinion of the

animus, as the pleaders say, which prompted the parties concerned in concocting this affair.

The Verdict.

"We find that the child in relation to which our inquiry has been held, was, in all probability, dead before the operation was performed by Surgeon Hayden; and we further find that, even if the fact were otherwise, then the operation performed by Surgeon Hayden was both well judged and well executed, and the result of which has been the saving of the life of the mother, which would, as it appeared on evidence, have been sacrificed by the delay or omission of such operation. And we feel it our bounden duty to give expression to these sentiments, lest any, the slightest, imputation might be thoughtlessly attached to Surgeon Hayden."

THE VERACIOUS MISCELLANY.

"*Prince*. What ho! there, officer, what are these halberts for? Who is to be scourged to-day?"

"*Officer*. A notorious ragamuffin—a very ass in a lion's skin.

"*Prince*. What's his offence?"

"*Officer*. Garbling and misrepresenting facts.

"*Prince*. Say you so? Hath he any other qualities?"

"*Officer*. Yea, he is a boaster before the rabble, but a craven before our gentles. He hath a knack of braying at the top of his voice in pothouses, but when he thrusts himself into an honourable house he is mute, and bows his head meekly. He pretends to be a wise fellow, and writes a journal. He is, an't please your highness, a white-livered knave—a kind of mongrel.

"*Prince*. Faugh! What a composition of villainy! Tie him to the halberts quickly—scourge him—scourge him, I say!"

Dumb Tom of Finsbury.—Old Play.

As we are not in the habit of perusing that vehicle of misrepresentation, the *Lancet*, we should not assuredly have honoured it with our notice in this number, had not a friend put into our hands, a few days ago, a copy of its last week's

lucubrations. On delivering it to us he observed—"I happen to be an elector of the borough of Finsbury, and therefore feel *something* for the poor fellow who has scribbled the trash in one of its leaders (p. 62) about some paragraph which appeared in your Journal. He has plainly *garbled* the passage in question, and, in endeavouring to bleed you has managed to cut himself. I fear his being turned into Parliament has turned his brain, if ever he had any, and that either his tongue or head is screwed on the wrong way. Do, gentlemen," he emphatically added, "set him to rights *if possible*." On hearing this pathetic speech from our friend, we cast a glance over the poor *Lancet's* slice of leader, and immediately perceived that it had been again at its dirty tricks, and, as usual, placed itself in a cleft stick. We assured our friend that its Editor was labouring under no new complaint, but merely an exacerbation of an old inveterate one. We promised, moreover, to school him forthwith, and to screw both his head and its contents in the right direction, *quam citissime*,

"Sic non aliter visum superis."

In its culprit leader, the *Lancet*, after swaggering in its genteel style about the ignorance of the non-medical press as to medical affairs, a subject, by the by, on which we will leave our readers to pronounce whether it can be a competent judge, after having convicted it, as we shall presently, of scarcely knowing how to put together or understand a sentence of English—the *Lancet*, we say, comes to that point which had kindled all its ire,—the dressing we gave it and its pigmy-parlour College of Medicine in Lancaster-place. This we achieved in a leading article of our 165th number three weeks ago. We must, however, confess, we did

not, when penning that savoury morsel for the *Lancet's* palate, wish to do anything more than act honestly by the profession. We exposed a piece of knavish quackery and its supporters, but had no desire to insert our sting into the vitals of the *Lancet* so deeply, as it appears by its writhings to have penetrated, and even now have some grains of pity for its sufferings.

We proceed to lay before our readers proofs of the imbecility and double-dealing of our *bright* contemporary. In one of its late numbers the following paragraph appears, in reference to Mr. Barnett and his correspondence with the Poor Law Commissioners.

"In removing the objection of which Mr. Barnett complains, that gentleman may imagine, possibly, that the Commissioners have rendered justice to medical practitioners generally throughout England and Wales; but the Commissioners will soon hear to the contrary from those practitioners who belong neither to the College of Surgeons in London, nor to the Apothecaries' Company in Bridge-street."

On this passage, knowing the miserable dotage of the *Lancet* on its scurvy *protégé* in Lancaster-place, we, in an article advocating the privileges of medical men who could produce proper qualifications from accredited sources, without reference to the *locus in quo* of such sources of education, commented as follows:—

"Now, if by the practitioners who neither belong to the College of Surgeons in London, nor to the Apothecaries' Company in Bridge-street, the *Lancet* means such as are possessed of no diploma or licence from *any* accredited source, but who are entitled to practise from having done so prior to 1815, we say they must be old hands, and not so fit for parish contracts as their younger, and—we must say it—better qualified brethren. *If such of the above are meant, as have bought a bit of paper, called a diploma, at the London College of Medicine, situated No. 9, Lancaster-place, Strand, for the magnificent sum of four guineas, we cannot say we pity their exclusion from the parish loaves and fishes, meagre as they are. But if such as practise without the diplomas or licences of the Lon-*

don College of Surgeons or Hall of Apothecaries, but yet possess licences from accredited sources, are included, we do not believe that the ban of exclusion will be enforced against them."

We ask, could the veriest tyro acquainted with his spelling-book misunderstand the above passage, or deduce from it any hostility on our parts to the recognition of diplomas or licences from any accredited source as entitling to hold medical offices? Have we not made such recognition the especial subject of the concluding sentence of the passage quoted? or else how is it to be interpreted? We said—"But if such as practise without the Diplomas or Licences of the Royal College of Surgeons or Hall of Apothecaries, but yet possess licences from accredited sources, are included" (*that is, among the Lancel's people, from whom the Poor Law Commissioners are soon to hear*), "we do not believe that the ban of exclusion" (i. e. *from medical offices*) "will be enforced against them; and throughout the whole of the passage seized on by our brilliant contemporary, have we not contra-distinguished accredited sources, in which, of course, were included the Universities of Edinburgh and Dublin, and the Irish and Scotch Colleges, from such wily, catch-penny humbugs as the parlour College of Medicine in Lancaster-place, for which the *Lancet* formerly, in its usual lying strain, held forth the prospect of a charter?—Yes, even a charter!—for what purpose it can best explain.

Let us see, however, what the *Lancet*, stung into a loss of its already tottering intellects by our exposure of its beloved College, makes of this plain paragraph. Too cunning and too mean to quote the whole of the passage, it extracts with its usual crooked tactics about two-thirds of the first period, and having, bitter as it was, chewed it within its pseudo-critical

maw, most heroically ventures to sound its penny trumpet to the following tune:—

"It is obvious (says the worthy) to the meanest capacity, that this precious commentator had not the slightest glimmering of recollection that a very great portion of the practitioners of medicine in England and Wales consists of graduates of the Universities of Edinburgh and Dublin, and members of the Irish and Scotch Colleges."

Excellent critic! Most profound logician! So, because the Scotch and Irish Universities and Colleges are accredited sources of medical education, we, who advocated any accredited sources, did not know of them—eh? Our expression was too general for your stagnant comprehension; you would fain have a list *seriatim*? But in the meantime what becomes of your morsel of criticism? We excepted all accredited sources from the ban of exclusion from medical offices, and you thence infer that we are ignorant of the existence of Scotch and Irish Graduates and members! Admirable! We upheld, in the identical passage of the article you decry, the privileges of men who could show Diplomas or Licences from any authorised sources, and repudiated the claims of such only as could not produce vouchers that they had a right to be considered medical men at all, and you immediately raise the cry of "Wolf," and think yourself a cunning fellow. Call you that logic? Further, if smarting, as you must have been, while perusing our leader through, your throes had permitted you to note down its meaning, you would have perceived that, first, we lashed, we hope into future silence, the contemptible affair of a college, puffed on the covers of your miscellany, with its four guinea bits of paper, and exposed its hollow pretensions; and, after doing so, ranged under its ragged banners as fit dupes for such a concern not one respectable individual, but

the *ci-devant* blacksmiths, farriers, tinkers, &c., who, pretending to an intuitive knowledge of medicine, infest our rural districts, exhibit as a diploma the worthless scrap, purchased at the London College of Medicine shop, and, perhaps, read; if they are able to do so, the *numerous truths* contained in your *Lancet*. What! because we deprecated the admission into medical offices of such a tribe as this, although readers of your immaculate pamphlet, or members of the spurious parlour College of Medicine, must you misrepresent that, *ergo*, we objected to men who are *properly* qualified, no matter at what accredited source? Call you that reasoning, Master Slender? Why one would think that the most leaden-headed spoon in your pay could enlighten your brain, or whatever substitute for that organ you may possess, in such a matter.

Such of our readers as do not know the *Lancet* will doubtless feel surprise that so stupendous a compound of ignorance and impudence as we have shown to have been exercised against us by it, could be the effusion of any one with a head on his shoulders, or who attempts the duties of an Editor—a school-boy would be whipped for such drivelling—and one would think that even a *silent* legislator might feel *somewhat* ashamed of it. But such an exhibition, humiliating though it be to his presumption, is too much the wont and usage of the garbler we have just hung up in *terrorem*, to be of any service in amending either his wit or his manners. It is true that he has been thrust into a situation where the purity of his tongue has been sorely clipped, and its ulcerous tendency well cauterised—where his brass has ceased to shine, and fear produced those effects which in many might be deemed modesty—but all this

avails not—when he has escaped from his nook of penitence in the “House,” he brawls again.

It is true, also, that after having shouted to the rabble vast promises of what he would accomplish in correcting abuses, &c., and of *how loudly* his voice should be heard, should they shoulder him into the “House,” his first essay in speechifying *there* not only rendered him afterwards dumb in that house, but brought upon him the most tremendous peal of laughter that ever abashed impudence and folly sunk beneath. Thenceforth, shrinking into his shell, he became inaudible; except when out of sight of those who had overwhelmed him with their ridicule. Yet such is the HERO who in a late *Lancet* called upon the profession, whom he had in vain endeavoured by his scribbling to level down to his own standard, to send him an account of any abuses in it they might be cognisant of. Such is the redresser of wrongs, who in *his* place in Parliament promises, though speechless there, to remedy everything save his own want of wit. A courageous and an eloquent champion, truly! We doubt, however, his ability; and as the profession can take care of themselves without the intervention of dumb animals, or of curs who can only bark when aloof from danger, we hope the offered protection will be declined. Indeed, the stupid ignorance our *contemporary* has displayed is fitter for the lash of the schoolmaster, than for the discharge of editorial or legislative duties.

KYAN'S PATENT.

A Commission has lately been appointed by Government to enquire into the question of the efficacy of Mr. Kyan's patent for the preservation of timber from dry rot: the members are Dr. Birkbeck, Mr. A. Copeland Hutchinson, Mr. Daniell, Captain Hayes, R. N., and Mr. Rotch, M. P.

THE POOR-LAW COMMISSIONERS AND MEDICAL ATTENDANCE.

In the series of Rules drawn up and approved of by the Poor Law Commissioners, for the management of one of the earliest unions of parishes, that of and around Dunmow in Essex, we find the following for the regulation of the medical attendants on the poor. As the principle here laid down may be taken as that from which the Commissioners will act generally, we lose no time in submitting the plan to our professional readers.

"22. The guardians shall contract with some competent person or persons duly licensed to practise as a medical man to be the medical officer or officers of the said union, and to attend duly to and punctually upon all sick paupers belonging to and resident within the union, either in the workhouse or otherwise, and to supply such sick paupers with necessary medicine; and such contract shall contain a clause by which the said medical officers shall engage to attend at a fair and reasonable charge per head, to be named in such contract, on all persons not belonging to any parish or place comprised in the said union, whom, by the law, any such parish or place may be bound to relieve, whether under suspended orders of removal or otherwise.

"23. The medical officer shall in every case, when required by the guardians or the relieving officer, or by the pauper on whom he is attending, give a certificate under his hand of the sickness of such pauper, or other cause of the attendance of such medical officer; the extent and nature of such sickness at the time of giving such certificate, and its probable duration, and such other particulars as may show how far the applicant is prevented from attending to his usual calling.

"24. The medical officer shall make a weekly return to the Board of Guardians, according to the form (F) hereunto annexed, and shall also attend the Board of Guardians when summoned by them."

REPORT.

The Select Committee, appointed to inquire into, and consider of, the Laws, Regulations, and Usages regarding the Education and Practice of the various branches of the Medical Profession in the United Kingdom, and who were empowered to report the minutes of evidence taken before them, have examined into the matters referred to them and agreed to the following report.

Your Committee beg to report, that, pursuant to the order of their appointment, they have inquired into the state of medical education, as prescribed by the regulation of the several Universities, Medical and Surgical Colleges or Faculties, and Apothecaries' Companies, and as actually practised at various

Schools of Medicine, Surgery, and Pharmacy, and also into the state of Medical, Surgical, and Pharmaceutical Practice in the three divisions of the United Kingdom.

The extent of the evidence necessary to the completion of the inquiry has obliged your Committee to continue examining witnesses until the latest period of the present session, and has prevented them from giving to the evidence that consideration which is essential to their drawing any such deliberate conclusion therefrom as they would feel justified in reporting to the House.

They therefore have confined themselves to reporting the evidence only, and beg to recommend that the Committee may be reappointed by the House in the next session for the purpose of considering such evidence, and reporting their opinion thereupon to the House.

13th August, 1834.

We herewith subjoin a list of the witnesses examined relative to the College of Physicians, in the order in which the examination took place.

Doctors—Francis Hawkins, Sir Henry Halford, Bart., William Macmichael, Edward James Seymour, Thomas Waterfield, Pelham Warren, James Arthur Wilson, John Elliotson, Archibald Billing, George Burrows, John Clendinning, John Sims, Neil Arnott, Sir David Barry, Sir George Tuthill, John Ayrton Paris, John Robert Hume, Henry Holland, Christopher Stranger, Alexander Tweedie, James Copland, Alexander Henderson, John Richard Farre, Sir William Knighton, George Birkbeck, James Johnson, James Clark, Francis Hopkins Ramadge, John Haviland, John William Willecock, Sir Charles Clark, Sir Charles Bell, Charles Locock, John Yellowly, Edward Harrison, John Kidd, Algernon Frampton.

VACANCY FOR CONSULTING PHYSICIAN TO THE GENERAL LYING-IN HOSPITAL.

THE decease of Dr. Macon has occasioned a vacancy as Consulting Physician to the General Lying in Hospital, and we are informed that Dr. Locock, one of the Physician-Accoucheurs to the Institution, has resigned, and is a candidate for the vacant appointment; also, that Dr. Ferguson, Professor of Midwifery to the King's College, is desirous to obtain the post vacated by Dr. Locock.

WESTMINSTER HOSPITAL.

THE celebration of the 119th anniversary of this charitable Institution took place on Wednesday last at the Freemason's Tavern. The principal medical officers of the Establishment, together with Sir Francis Burdett and many other persons of distinction, were present.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, April 9th, 1835:—Ronald Montgomery, Brentford; Arthur Quartley Palmer, Christchurch, Hants; Arthur William Dumville, Manchester; William Wallis, Hartfield, Sussex; Richard Jones, Newcastle-under-Lyne; Chas. Harwood Greene, Brewood; George Tinniswood, Carlisle.

MISCELLANY OF FACTS.

Dr. C. J. B. Williams has been elected a Fellow of the Royal Society.

His Majesty has appointed Sir William Burnett, M.D., one of the Royal Physicians in Ordinary, in the room of Sir Gilbert Blane, deceased.

The Case of Poisoning at Bristol.—Our readers may recollect that their attention was directed some short time since to the result of a coroner's inquest at Bristol, when a verdict of wilful murder was returned in a case where death had occurred some months previously to an investigation into the nature of the circumstances taking place. The prisoner has been since tried, and, after a patient and laborious examination of the facts, found guilty, and condemned to death. There cannot be a doubt on the minds of any who have read the evidence of the correctness of the verdict.

Brutal Conduct of General Mina.—In an order of the day lately promulgated by the Christiano General Mina is the following passage:—After threatening death to every fifth man among the fathers of the Carlist soldiery, and the destruction of their habitations, it goes on to state that the same punishment awaits all doctors, surgeons, or apothecaries, who shall give their assistance or provide drugs to the wounded Carlists. The infamous brutality of this order needs no comment. The surgeon has been hitherto always considered a non-combatant, and treated accordingly.

The prize medal of the Edinburgh Hunterian Medical Society has this year been awarded to Mr. John M'Lagan, of that city.

The College of Surgeons have this year awarded the Jacksonian prizes—one to Mr. Dickenson Webster Crompton, of Temple-row, Birmingham, for a Dissertation on Injuries and Diseases of the Nose and of the Nasal Sinuses; the second to Mr. Thomas Blizard Curling, of St. Helen's place, for a Dissertation on Tetanus.

A writer in a contemporary weekly periodical has thought proper to vituperate the medical press, and, among other charges, to accuse it of charlatanism. We are not aware who the writer is, whether medical or not, but, for the sake of the profession, we hope that he does not rank among us. We, however, in the true spirit of kindness, would advise him to abstain for the future from endeavouring to bestride so restive a steed as he will, he may feel assured, on mounting, find the medical press. Let this first attempt be his last, or he may live to wish he had ascended the back of some gentler Pegasus.

APPOINTMENTS.

Naval.—Mr. R. Burrell, surgeon, and Mr. K. D. Pritchard, assistant-surgeon to the Sapphirer. Mr. S. Mackey, surgeon, and Mr. D. Low, assistant-surgeon to the Tweed. Mr. M. Corry, assistant-surgeon of the Dee, to the Thunder. Dr. Mansell, assistant-surgeon to the Barham. Mr. Caldwell, assistant-surgeon at the Island of Ascension. Assistant-Surgeon J. Watson to be surgeon. Mr. J. Taylor, assistant-surgeon to the Tartarus.

Military.—Staff Assistant-Surgeon J. Mellis to be assistant surgeon of the 76th Foot, v. Russell,

who resigns. Dr. John Garnett Courtney, to be assistant-surgeon to the Forces, v. Mellis.

General.—Mr. Ernest Coleridge, of Beaumont-street, Portland-place, surgeon to the Western General Dispensary (Mr. George Webster, of Connaught-terrace, was also a candidate). Mr. R. Malcolm, of Moore-place, Lambeth, surgeon to the Surrey County Gaol in Horsemonger-lane. Mr. J. May, surgeon-accoucheur to the parish of Stoke Damerel, Plymouth. Mr. D. W. Crompton, surgeon to the Birmingham Eye Infirmary.

Resignations.—Mr. W. W. Beever, house-surgeon to the Manchester Royal Infirmary. Mr. Hodgson, surgeon to the Eye Infirmary, Birmingham. Mr. Heath, senior resident-surgeon of the Birmingham Dispensary.

DEATHS.

Near Wells, Somersetshire, Dr. William Blackburne, formerly of Cavendish-square, London. Dr. Gabriel Clarke, of Stafford-street, Dublin. Mr. E. A. Jennings, of Leamington, surgeon. In Newcastle, Mr. John Mark, surgeon, late of Hwarth. Mr. Thos. Richardson, surgeon, of Plymouth. At Bangalore, East Indies, Dr. William David Diggs Latouche, formerly of Dublin.

CORRESPONDENTS.

The statement concerning the substitution of Mr. Guthrie for Mr. Alexander in attendance on H.R.H. the Duke of Sussex, inserted in our last, is incorrect. We had the information from a gentleman who says he had it from Mr. Alexander.

We have received a circular signed by the principal medical officers of Bartholomew's Hospital, wishing to prolong the medical session to ten months instead of eight, and also during the period allotted for medical study to divide the anatomical and clinical instructions into separate periods. The plan appears feasible enough, and we intend to make a few observations upon the subject in our next.

Mr. Goyne.—His letter, with comments, shall be inserted in our next. Press of matter has prevented our noticing it in the present number.

T. H., M.D.—The facts which our correspondent have forwarded to us will meet with just consideration, but we shall refrain from publishing them unless he favours us with his name and address.

Dr. B. No: the lectures have not been published.

The clinics of M. Velpeau at La Charité have been received.

P. Y.—Neither the College of Surgeons nor College of Physicians examines in obstetrics.

Obstetrician.—Sir A. Carlisle, when President of the College of Physicians, published letters against "Man-midwifery."

Medicus.—The charter was given to defend the public from quackery. Now is this fulfilled?

Tyro.—To the Colleges are attached the prejudices of age. Several of the Colleges have their jurisdiction restricted to the vicinity of the capital.

In consequence of going to press earlier than usual, we have been obliged to omit the Bill of Mortality in the present number.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 355, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At the Meath Hospital during the Session of
1834-5.*

LECTURE VIII.

GENTLEMEN,—In my last lecture I gave a brief summary of the opinions which I had published on the subject of nervous pathology, in the year 1833, and showed that the principles there laid down were entitled to serious consideration, as connected with the explanation of many forms of paralysis hitherto not well understood. I trust I have proved, to your satisfaction, that the nervous extremities have been too much overlooked by medical writers in seeking to explain the source and origin of paralytic affections; and that many cases of loss of the power of motion and sensation can be clearly traced to the agency of causes acting primarily on the sentient extremities of the nervous system. I adduced numerous facts to show, that an impression made upon some portion of the extremities of the nerves may be propagated towards their centres, and transmitted thence to other and distant parts, producing there pain, spasm, impairment of sensibility, and diminution or total loss of muscular power. With reference to the subject of paraplegia, I cited the cases published by Mr. Stanley, and expressed my opinion, that the loss of power in the lower extremities was the result of a morbid action commencing in the sentient nerves of the kidneys, and propagated through the medium of the spinal cord to the muscular and sentient nerves of the lower limbs; and I brought forward some new cases of paraplegia supervening on inflammation of the bowels, with the view of illustrating the principles I had already laid down.

In the next class of cases we have to consider the cause of the paraplegia is extremely obscure—I mean those cases in which the paraplegia occurs during the course of fever. Here the other sufferings of the patient, and

his general debility, attract our notice so exclusively, that the paralysis entirely escapes notice until convalescence is established,—until, in fact, the patient wishes to support himself on his legs. He then finds, much to his surprise, that his limbs collapse under him, and that he has little or no power over them; this appears to him the more extraordinary on account of his having recovered a good deal of strength in his upper extremities. Thus, a Miss F. was attacked in fever, while on a visit to a friend in Dublin. She was attended by Mr. Carmichael. Her fever was protracted and severe, and exhibited during its progress well-marked symptoms of gastro-intestinal irritation and congestion, viz., tympanitis, epigastric and abdominal tenderness, &c. When her convalescence was established, her attendants found, to their great alarm, that she had no power in her legs. She complained of coldness and numbness in the lower extremities. This lady gradually recovered the use of her legs, but not until moxas without number had been applied along the course of the spinal column. The cure lasted about a year. No evidence could at any time be detected indicating disease of the spinal bones or ligaments. Mr. Carmichael has seen several cases of paraplegia following the remittent gastric fever of children, totally unconnected with spinal disease. Such an occurrence is most usual in children of a scrofulous temperament, and is seldom, very seldom, remedied either by time or medicine. Two explanations suggest themselves as capable of accounting for the paraplegia after fever. The first rests upon the frequency of the occurrence of violent pain in the small of the back in the commencement of this disease. This pain in the back is often excruciating, and generally accompanied by proportionally violent pains in the lower extremities. I am quite as anxious to relieve the pain in the back in the beginning of fever, as I am to remove headach; one is almost as serious as the other, for the vital importance of the spinal marrow in the economy is scarcely less than that of the brain.

In reference to this point of practice, I have been in the habit of using the expression (in order to fix the attention of my pupils) that

such a patient has not any pain in his head, but he has gotten his headach in the small of his back. Now, when headach is the prominent feature of the first stage of fever, how few will omit bleeding, leeching, cupping, cold or hot applications, &c., &c. When, on the contrary, the lumbar spinal marrow is the seat of the congestion, how generally do practitioners neglect the application of topical bleeding and other appropriate remedies. Were such neglect of less frequent occurrence, it is probable that paraplegia after fever would not so often be met with. Some may be inclined to look for the source of the paraplegia which follows fever in the irritation of the gastro-intestinal mucous surface, propagated by a reflex progress of the spinal marrow. It is not easy to decide between these two explanations, but I confess myself more inclined to adopt the former than the latter.

I shall now proceed to lay before you some facts and cases illustrating the nature of another form of paraplegia, a form of extreme interest, from the circumstance of its being hitherto but little understood, and not mentioned by any writer I am acquainted with, as well as from the peculiar nature of its origin and the frequency of its occurrence. I have, within a comparatively short period of time, met with several instances of this affection, and have some cases of it at present under treatment.

Before I enter on this part of the subject, I may be allowed to remark, that in some cases loss of the power of motion in a limb can evidently be traced to the operation of a cause whose action is confined altogether to the surface. Thus, in the case of a woman in Sir P. Dun's Hospital, erysipelas occupied the calf and inside of the right leg, and occasioned some inflammation and tenderness along the chain of lymphatics extending to the groin, where one of the inguinal glands was slightly enlarged and painful. The erysipelas yielded to the employment of local and general remedies; but, for several days, and particularly while the disease was at its acme, she was altogether destitute of any power of motion in the affected limb: she could neither bend the leg on the thigh, nor could she raise the whole limb. This affection must have been produced by a reflex action propagated from the cutaneous branches to the larger muscular nerves. It is evident, that the muscles which move the leg on the thigh could have been affected only in this way, for they lay far above the part in which the erysipelatous inflammation existed. It is in the same way that we are to account for the paralysis observed in cases of phlegmasia dolens.

Sometimes the reverse of this happens, and a single limb becomes paralysed, on account of an injury done to one of its principal nerves by the application of sudden violence, or of pressure long continued. Thus, a case was related to my friend Dr. Brennan and myself, in which a robust gentleman, having been

much fatigued during the day, fell asleep after dinner, his head resting on his arms, which were crossed on the table. In consequence of some unfortunate awkwardness in his position one of the ulnar nerves was compressed during the time he slept, and, on awaking, his fore-arm and hand were completely powerless. Many remedies were tried in this case without success, and the paralysis continued until the day of his death, which occurred several years afterwards. A lady, not long since, was tripped in walking across the floor, and fell with considerable force. The parts which sustained the principal shock were the left hip and trochanter. From the moment of the accident she lost all power in the left lower extremity, which remained permanently paralytic. Fracture or dislocation was suspected at first, but a minute and careful examination showed that the suspicion was groundless. No injury of the spine could be detected, and she had no numbness, pain, or formication, in the affected limb. After a month she was placed under the judicious care of Mr. Kirby, who used every topical application likely to prove useful, but without the slightest benefit. She returned to the country, where she died shortly afterwards, quite unexpectedly, in the bloom of life, and without the occurrence of a single symptom indicative of approaching danger. No autopsy was permitted.

I shall now, with the view of illustrating the form of paraplegia to which I have alluded, read the following very remarkable case which I had an opportunity of tracing through all its stages, and which made a very considerable impression on me at the time. The history is chiefly derived from notes furnished by the patient himself before he became too weak to write; what relates to the latter stages of his complaint is taken from my own case-book.

"Mr. B. aged 23, was remarkably strong and healthy, though of a spare habit. He was able to take a great deal of exercise, capable of enduring much fatigue, and passionately fond of hunting, fishing, and shooting, particularly the latter; and, in pursuit of his favourite amusements, frequently exposed himself to wet feet during his excursions through bog lands, and when wading in the water. These habits, however, he laid aside after the occurrence of the first attack of his illness, which happened in 1829. He had for many years been of a costive habit, his bowels being frequently confined for a week at a time, but did not experience any sensible bad effects from this circumstance, and never took any aperient medicine. Since the first attack in January 1829 this state ceased, and his bowels became ever afterwards inclined to looseness, which always increased before the appearance of one of the attacks, accompanied by griping, nausea, and inclination to vomit. Each attack was generally preceded by a copious secretion of insipid watery fluid in the mouth, and then the characteristic symptoms of his

disease commenced. These consisted in obstinate and protracted nausea and vomiting; he first threw up whatever happened to be on his stomach at the time, and afterwards every thing he swallowed, whether solid or liquid. The matter ejected was at first acid and afterwards bitter, varying in colour from mucous to bilious, but being generally of a greenish and occasionally of a bluish tinge. The greenish fluid annoyed him much from its extreme bitterness, and the quantity thrown up in the course of a day varied from three to four quarts of fluid. He complained also of pain referred to the stomach or lower part of the chest, which continued throughout the attack, being most acute at its commencement; for the last year this sensation had passed into a feeling of painful constriction, which he described as a "contracted feeling of his inside," and compared it to something like the effects of a cord drawn tightly so as to compress or strangulate his body exactly along the outline occupied by the insertions of the diaphragm. During the prevalence of the attack, he had profuse perspirations, particularly towards the termination of each paroxysm. The duration of the first attack did not exceed four or five days, after which he became quite well, and continued so for six or seven months, when his symptoms suddenly returned. He began to reject every thing from his stomach as before, but in the course of a few days the vomiting disappeared, and for a considerable interval he had no return of his complaint. In the year 1830 he had three attacks of a similar description; from these he recovered also completely, and without remarking any diminution of power in his lower extremities. In 1831, however, the disease began to assume a more serious aspect; the paroxysms became much increased in severity, lasted longer, and recurred at shorter intervals. For one of these attacks he took mercury and was salivated. In 1832 his symptoms became still more violent, and the duration of the paroxysms more protracted. He had one in March, a second in May, and a third in June, each of which was accompanied by some numbness and loss of power in the lower extremities; this, however, was slight, and disappeared altogether as the vomiting subsided. About this time he noticed that his urine was scanty, and deposited more sediment than usually. He also complained of being very apt to catch cold whenever he got out of bed, and stated that he suffered occasionally from severe twitches and pains in his legs, thighs, arms, and other parts of his body, which were generally succeeded and carried off by profuse perspirations.

In August, 1832, he had a violent attack, which lasted nearly a month. The vomiting was incessant, continuing night and day, and he suffered severely from the feeling of painful constriction already described. On getting up after this attack, his legs suddenly failed

him, and he dropped down on the floor quite powerless. The paralysis did not now disappear during the intervals, although it grew somewhat better after each fit of vomiting had ceased; indeed he used to improve in his walking after the paroxysm had entirely disappeared, and, aided by two sticks, supported himself so as to give some hopes of a recovery, until a recurrence of his attack reduced him again to a state of almost total paraplegia. His legs now began to waste sensibly, and he noticed that they had lost their feeling and were remarkably cold. He also complained of severe twitches of pain in various parts of his body, accompanied by profuse night sweats, and turbid, scanty urine.

For some months before his death he was completely paraplegic, and continued to be attacked with violent fits of vomiting. The vomiting went on night and day, and he was unable to retain the mildest and most soothing substances for a moment on his stomach. Mr. Crampton and Dr. Ireland attended him with me, and we had recourse to every thing we could think of to allay the irritability of his stomach but in vain. After continuing to resist obstinately every form of treatment for five or six days and nights, the vomiting would suddenly cease, the gentleman would exclaim, "Now I am well," and he would then eat with perfect impunity substances which would prove irritating and indigestible to many stomachs. This was one of the most singular circumstances I ever witnessed. The transition from a state of deadly nausea and obstinate retching to a sharp feeling of hunger, used to occur quite suddenly. One hour he was the most miserable object you could behold, racked with painful constrictions across the epigastrium, alternately flushed or bathed with cold perspiration, and rejecting every thing from his stomach, the next found him eating with a voracious appetite whatever he could lay hold of, and digesting every thing with apparent facility.

It may be observed that as the disease in this case proceeded, the intervals between the attacks became diminished, while the paroxysms became increased in duration. For the first two years they continued only for four or five days, and appeared at intervals of six or seven months; latterly they used to last for eight or ten days, and returned every third or fourth week. During the paroxysm the only thing which he took was a little cold water with some brandy and a few drops of laudanum, which remained longer on his stomach than any thing else, and enabled him to enjoy a few minutes' sleep. He never complained of any headach, and his intellect was remarkably clear and his memory good.

No trace of organic disease could be detected in the abdominal viscera, and there was not the slightest tenderness over any part of the spine. He also retained to the last a complete power over the bladder and rectum.

At length his system began to give way;

long confinement to bed, and the frequent recurrence of these exhausting attacks, completely wore him out, and he sank on the 30th September, 1833. A post-mortem examination was allowed by his friends, and we scrutinised every part of his system with the most anxious care. The brain, cerebellum, spinal cord, and their investing membranes were carefully inspected; we examined the large nervous trunks that supply the lower extremities, inspected the viscera of the thorax, and searched for evidences of disease in the stomach and intestinal tube; we could find none. There was no lesion of the brain or spinal cord, no thickening or vascularity of membranes, the large nerves exhibited their normal condition, the stomach was perfectly healthy, the intestinal canal natural, the liver and other glandular viscera of the abdomen without any trace of appreciable derangement.

Here then, gentlemen, was a case of perfect paraplegia (I say perfect, for he had lost all power of his lower extremities for more than two months before his death), which may be fairly termed functional, inasmuch as there was no lesion of any part of the nervous centres to explain the phenomena present. How then are we to account for them? The first symptoms were undoubtedly those of abdominal irritation, as manifested by the tendency to diarrhoea in an originally costive habit, accompanied by violent paroxysms of vomiting which recurred at distant intervals. Are we to attribute this diseased condition of the stomach and bowels, which, from the remarkable periodicity of its occurrence, was evidently functional, to irritation, congestion, or inflammation of the brain or spinal marrow? From the data we are in possession of, it appears that this question must be answered in the negative. There was no headach, heat of scalp, throbbing of the temporal arteries, or other sign of determination to the head, or congestion, or inflammation of the brain, either before or during the attacks. The patient's intellect was all throughout remarkably clear, and his memory good. Again, if we look for the origin of the disease in the spinal cord or its investments, we can find nothing to assist in explaining the phenomena. There was no pain in any portion of the spinal cord, and at no period of his illness could we detect any tenderness over the spinous processes. The history of the case seems to prove that whatever was the cause which operated on the nerves of the stomach and intestines, it gradually extended the sphere of its morbid influence to the spinal cord, and, through it, implicated the nerves of the lower extremities. The case is in many respects highly interesting, and well worthy of the attention of the pathological inquirer. The dissection was conducted, in the presence of Dr. Ireland and myself, by my friend and former pupil, Mr. Harris, so advantageously known for his skill in morbid anatomy. It was not made in a hurried or

careless manner, each organ was carefully examined, and the process occupied at least four hours.

The next case to which I shall call your attention is one which I have already given in a former lecture: it seems, however, to be so similar in the nature of its exciting cause to the foregoing, though differing in some of its symptoms, that I shall beg leave to repeat it here.

James Moore, aged 32, was admitted into the Meath Hospital on the 3rd March, 1833, under Dr. Stokes's care, for an attack of paraplegia, which he attributed to cold and wet feet while engaged in working in a quarry. About a month before admission he perceived a stiffness of the great toe of his right foot, afterwards numbness and coldness of the sole, and then of the leg as far as the knee, and dragging of the limb in walking. During the progression of the disease up along the thigh it commenced in the left foot, and, after a few days, he experienced almost complete paralysis of sensation in the right lower extremity, and a lesser degree in the left, accompanied by so much diminution of the power of motion, as to render him unable to walk without support. About three weeks after the appearance of paralysis in the lower extremities, the little finger of the right hand was attacked with numbness, which passed successively to the rest, attended by some loss of the sense of touch and power of grasping objects. He had also retention of urine, and the bowels were obstinately constipated. There was no tenderness over any part of the spine. He had no pain in the head; his pupils were natural; pulse, sleep, and appetite also natural.

Here we have an instance of paraplegia apparently originating from an impression made on the nerves of the lower extremities. The man had been engaged in draining a quarry, and during his occupation was constantly exposed to wet; shortly after this he begins to complain of numbness and loss of power in the right lower extremity, and, during the progression of the disease up along the limb, the left becomes similarly engaged. About three weeks afterwards, the hands, which had been also but not so frequently exposed to the influence of cold and wet, begin to be affected with numbness, and the power of grasping objects becomes diminished. To what can we attribute these symptoms, except to the influence of cold acting on the nervous filaments of the cutaneous surface of the limbs, extending its morbid impression to the spine, and thence reacting on the nerves, so as to produce impairment of the power of motion and diminished sensation? The man certainly had no symptom of cerebral or spinal disease, nor was there any thing connected with the state of the nervous centres which would lead to the supposition that paraplegia was the result of an irritation originally affecting the brain or spinal cord. It was on these grounds that I gave it as my opinion at the time, that

the disease was an example of creeping paralysis, having its origin in an affection of the peripheral extremities of the nerves.

The next case is one which was also under treatment in the Meath Hospital during the course of last winter: for the particulars I am indebted to my colleague, Dr. Wm. Stokes.

A robust middle-aged man was admitted into the chronic ward of the Meath Hospital in the latter end of February 1834, labouring under paraplegia. He stated that he was generally employed as a boatman about the river and port, was frequently exposed to cold and wet, particularly in his lower extremities, and that he was in the habit of drinking freely. He had enjoyed good health until about seven weeks before admission, when he was seized with numbness of the feet and legs, which, after continuing for three or four days, was followed by tingling pains running along the course of the nerves. He then remarked that the power of his lower extremities became much diminished, and this gradually increased so as to prevent him from walking or even standing without support. His bowels became obstinately costive, and, about a month after the commencement of his attack, he perceived that his urine was discharged in smaller quantity than usual, and that he was much more frequently called on to pass it than before. He also mentioned that he had gonorrhœa about six months before, and that he had used balsam copaibæ and injections. Some time after this he said he noticed some white matter passing with the urine, but did not pay any particular attention to it as it gave him no inconvenience. His appetite was tolerably good, and he had no headach or any symptom of determination of blood to the brain. He denied having received any injury of the back, and there was no tenderness over the spinous processes of the vertebræ. He had no pain in the spine, either before or since the occurrence of his illness, nor was there any symptom of inflammation of the substance or membranes of the spinal cord. When admitted, he had considerable diminution of sensation and complete loss of motion in one of the lower extremities; in the other he still retained some power. He had also retention of urine, requiring the daily use of the catheter.

The treatment was as follows:—He was placed on one of Dr. Arnott's hydrostatic beds, as there was a great tendency to stripping over the hips and sacrum, a purgative pill was administered two or three times a-day to remove the costiveness, and he was ordered to be cupped over the loins. The latter was done in consequence of his complaining of some tenderness on pressure in the situation of the kidneys. His symptoms however, went on without any improvement, and he died about a month after his admission.

On dissection the following phenomena were observed. The kidneys (which were first examined) appeared rather soft, and of a

yellowish colour, but there was no vascularity, suppuration, or other change of structure. The ureters were somewhat distended, but presented no other trace of disease. The bladder was contracted, its muscular coat thickened, and its mucous membrane very vascular. There was no affection of the prostate. On examining the spinal cord, Dr. Stokes observed that he thought the cauda equina appeared to be slightly softened, but remarked that from its appearance he could not state that it was actually diseased. The rest of the spinal cord appeared healthy and normal; there was no vascularity, effusion, or softening. External to the sheath of the cord there was a small, flattened, oval body, about the size of half a very small hazel nut, and of a consistence intermediate between lymph and fat. Around this there was some slight degree of vascularity. Dr. Stokes observed, that from the small size of this body, and the peculiarity of its texture, he entertained strong doubts as to its having any influence in the production of the symptoms noticed during life. He remarked, although it might have been originally the product of inflammation, and have existed in the form of an effusion of lymph, still the circumstance of its conversion into a fatty substance proved that it must have existed for a very considerable time, and the smallness of its size, as well as the obscurity of its origin, did not by any means satisfactorily explain the occurrence of paraplegic symptoms.

The next case which I have to lay before you, appears to be analogous in its mode of origin to the former. "A gentleman of strong constitution, and extremely fond of field sports, particularly fishing and shooting, exposed himself repeatedly to wet feet at a time when he was labouring under the effects of a long mercurial course. Taking large quantities of blue pill, and exposing the lower extremities to wet at the same time, are circumstances which have an obvious tendency to produce disease, and it is not to be wondered if this gentleman became the victim of his want of caution. He got numbness and weakness in his legs, which he at first attributed to fatigue and over exertion; but as the disease went on, he became more and more powerless, and, finally, applied to me respecting his illness. On examination I found that he had no pain in the back, or tenderness on pressure, nothing, in fact, to indicate any original affection of the spinal cord. The functions of the brain also were natural, and there was nothing about him to lead me to suspect cerebral disease. He had, however, considerable impairment of the muscular functions of the lower extremities, and could not walk without the aid of crutches, or some person to support him. In treating this case, I looked upon it as an instance of imperfect paraplegia, in which the paralysis apparently rose from impressions made upon the sentient extremities of the nerves of the legs and feet, at a time when these nerves were particularly liable to be deranged in their

functions from the previous use of mercury. I, therefore, had recourse to remedies directly applied to the extremities of those nerves, and fortunately succeeded in restoring this gentleman to the use of his limbs. The cure, however, was not perfect, for a very notable degree of weakness still remains.

Of this form of paraplegia I have now witnessed many instances. In most cases I was induced to think that it arose from impressions made by cold and wet on the lower extremities. It is most commonly observed in young gentlemen who are addicted to fishing and shooting, and who in pursuit of their amusements get wet feet repeatedly, from walking over boggy grounds, or wading in the water. It is also observed in labourers whose employment obliges them to stand in water for many hours together, as in draining, pump-sinking, and other similar occupations. In all cases it assumes the creeping form, and generally appears at first in one limb, and afterwards in the other. There is, however, considerable variety in the rate of its progress; in some cases the patients become almost completely paraplegic in a few weeks from the commencement of the disease, in others it will go on for months, and even years, before the power of the lower extremities is completely destroyed. Where its progress is slow, it makes its approach in an insidious manner, and is at first scarcely noticed by the patient. Its latency is here further favoured by the absence of pain, numbness, or formication; for it is only at the more advanced stages of such cases that derangement or diminution of sensation is noticed. It is only when making some unusual exertion, as in going up stairs, or ascending a hill, that the patient finds a more than ordinary degree of weakness in the lower extremities. The first symptom which generally attracts his attention is an incapability of walking as far as he has been accustomed, but this is attributed to some temporary weakness, or is considered to be the result of previous fatigue. As the disease progresses, walking up an ascent becomes a matter of some difficulty, there is a shuffling motion of the legs, and the patient is apt to stumble from slight obstructions. Gradually the loss of power becomes more manifest, it excites the attention and surprise of the patient, and he finds that he is no longer able to walk without the aid of a stick or some person to lean on. The paralysis is, however, seldom complete, with the help of crutches the patient continues to hobble about, and it is only in bad cases, and at an advanced period of the disease, that he becomes completely paraplegic. The paralysis is never so sudden nor so complete in this form of paraplegia, as it is in cases of disease of the spinal cord, or scrofulous ulceration of the bones and ligaments.

In other cases, however, the paraplegia, though evidently of the same origin, and having the same creeping character, advances with much more rapidity; and the patient may, in

a few weeks from the commencement of the attack, experience a very considerable diminution of power in the lower extremities. In such cases, it will be generally found that one limb is much more affected than the other, the loss of power being most complete in the limb which was first engaged.

With respect to sensation, it appears to be affected as well as motion. In the slow and chronic form of this species of paraplegia, it does not attract the attention of the patient so quickly as the derangement of muscular power; it is generally some time before he notices any diminution of sensation, and then accidentally. In the more advanced stage, however, this becomes manifest, and is accompanied by a sensation of cold in the lower limbs, which seldom extends higher than the knees. In the more rapid and acute form, the derangement of sensation is much more obvious, and is generally the first symptom noticed by the patient. There is at first a feeling of numbness, which commences in the toes or feet, and extends up the limb: this, in the course of a few days, is followed by formication and tingling pains in the course of the nerves, and then loss of power and diminished sensation. There is, however, in both these forms of paraplegia, much less impairment of sensation than of motion, and the loss of sensation is never so complete as in paraplegia from disease of the spine.

There is one curious symptom occasionally observed in this disease, which is that, before the appearance of any decided symptoms of loss of power in the lower extremity, irritation of the lower part of the digestive tube takes place; the rectum becomes morbidly excited; the patient complains of tenesmus, and thinks he is about having an attack of piles. This was the first symptom observed in one of the cases I attended; the patient complained so much that we were induced to examine the state of the rectum, but could not find any thing to account for the morbid excitement. The same observations apply to the bladder, with this exception, that the morbid irritability of this organ occurs occasionally after the disease is confirmed, and has made considerable progress. On the whole, however, affections of the bladder and rectum are rare in this form of paraplegia; and it is only at the advanced stages that we sometimes meet with that derangement in the motor powers of the bladder and rectum, which occurs so frequently, and at such an early period, in the paraplegia from spinal disease.

In cases of paraplegia from disease of the spinal cord or its investments, it has been observed that the urine becomes altered in its quality, and assumes an ammoniacal odour. I have not observed this occurrence in the forms of paraplegia that I have detailed. The urine is turbid, scanty, and voided oftener than usual; but I cannot say that I have seen it in any case decidedly ammoniacal, even in the advanced stages of the disease, and where the

patient was completely bedridden. Should future observations prove that this diagnostic mark is constant, it may be of some value in distinguishing this from other forms of paraplegia.

In these cases there is scarcely anything which would lead us to fix on the spine as the seat and origin of the disease; neither can we find anything in the brain with which we can connect the paraplegic symptoms. There is no pain of the head or spine, very seldom any tenderness, the patients are in the full vigour of intellect, and all the organs of sense in their normal condition. The functions of respiration and circulation are unaffected; and it was remarked in the first case which I have detailed, that there was no change in the pulse, either during the fits of vomiting or the intervals of ease. The appetite also is generally good; but, in almost every instance I have met with, there has been remarkably obstinate constipation.

With respect to the prognosis and treatment of this form of paraplegia, I have but little to say. The prognosis is generally unfavourable, particularly where the disease has lasted for some time, and is accompanied by morbid irritation or loss of power in the bladder or rectum. It is also bad in proportion to the slowness with which it has come on, and the absence of pain or formication of the lower extremities. With respect to treatment, I may observe that I have never seen any benefit derived from applications to the spine. The application of blisters or issues over the back or loins does not appear to be productive of the least good effect; of the latter I can speak positively from experience. They are an enduring source of annoyance to the patient, and never produce the least amelioration of symptoms. I am in the habit of applying my local remedies to the legs and thighs, selecting those parts in which the greatest cutaneous sensibility exists. What I generally do is to keep up a succession of blisters along the inside of the legs, and over the anterior and inner parts of the thighs. The practice of medicine furnishes many proofs of the utility of stimulant applications to the nervous branches, in case of disease affecting the larger trunks. Thus, in sciatica, a blister applied over the ham or calf of the leg, where many of the ultimate ramifications of that nerve are superficial, will frequently produce a much more decided effect than when applied over the origin of the nerve itself. Liniments of a stimulating kind, and blisters repeatedly applied, are the local means on which I chiefly rely in the treatment of this form of paraplegia. After some time, I commence with the use of strychnine, and continue it until some sensible effect on the system is produced, when I omit its further use, and have recourse to the exhibition of sulphur. These are the two internal remedies from which I have derived most benefit. I have in such cases seen very good effects from a perseverance in the use of the sulphur electuary, of

which I have given a formula in one of my published lectures. Much also will be accomplished by the external use of sulphur in the form of baths, and hence cases of paraplegia of this kind might be materially benefited by the internal and external use of the waters of Lucan, Harrogate, Baden, Barège, &c. With respect to the use of mercury, it appears to be decidedly injurious. I have seen it given in three cases: in all it did much more harm than good.

This is all I have to say at present on the subject of paraplegia. I fear much that many omissions and considerable deficiency of materials will be observed in the statements I have laid before you. I hope, on some future occasion, to be able to communicate a more minute and better digested series of observations on this obscure form of disease. The subject, however, is in itself so interesting and so important, that I have been tempted to bring it before you, perhaps prematurely. My anxiety to excite discussion, and attract further attention to a department of practical medicine hitherto quite neglected, must on this occasion plead my excuse.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXVIII.

Dystocia—Malposition of the Child.

GENTLEMEN,—Having made you acquainted with the various operations in midwifery which relate to labour, you are now fit to enter upon the subject of dystocia itself; I shall, therefore, commence the subject to day, beginning with the first species, viz. where labour is rendered difficult or impossible to be completed by the natural powers, on account of malposition of the child; in doing so I must request you to bear in mind the important fact which I have already mentioned to you on more than one occasion, viz. that a full grown foetus can always be born, so long as it presents with its long axis parallel to that of the uterus, provided the pelvis be not distorted, or, which amounts to the same thing, to that of the superior aperture of the pelvis. Oblique and transverse positions of the uterus were looked upon as the chief cause of faulty position of the child in the last century; this opinion, which was first broached by H. Van Deventer in his *Novum Lumen Obstetricantibus*, published in 1701, excited much attention, far more than it really deserved.

The immense number of presentations which Baudelocque has described, is the great

fault of his otherwise excellent work. A stuffed puppet was stuck into a pelvis in every possible manner which could be devised, and this was described as a peculiar presentation, and rules given how to distinguish it, and how to proceed with the delivery, although many of these presentations, indeed I may say the greater part, never occurred in nature. Thus he actually enumerated between eighty and ninety different positions of the child. How different is all this confusion to the plain practical observations of Dr. Denman. "The presentations of children at the time of birth," says this distinguished accoucheur, "may be of three kinds, viz. the head, the breech or inferior extremities, the shoulder or superior extremities; the back, belly, breast, or sides, properly speaking, never constitute the presenting part."

Burton says, that, next to the head presenting, the arm is more liable to offer itself than any other part. This is not, perhaps, quite correct, but, at the same time, I deny that a full grown living child can ever present with the back, breast, abdomen, &c. I wish you, therefore, gentlemen, to understand, that when I speak of malposition of the child I simply mean where it presents with the arm or shoulder. Professor Naegele, who, from being at the head of the midwifery department in his district, is necessarily made acquainted with the particulars of every labour which is at all unusual throughout a very extensive tract of country, assured me that out of some thousand turnings which have occurred in the neighbourhood during the last twenty years, on account of faulty position of the child, there have been, perhaps, one or two cases where the arm or shoulder did not present. Other presentations, it is true, have occurred, but these were only where the child was born prematurely, or where it had been dead some little time before birth.

A child which has not been carried the full time, or where it has been dead for some days, follows no rule whatever, it may come *any how*. In the first case it is too small to follow any peculiar course; it presents little or no resistance, and therefore the form of the passages can have no effect in directing its progress. In the second case, a dead child, after a short time, becomes so soft and flaccid from the loss of its vital elasticity, that it can be moulded into any shape by the pressure of the uterus, and under these circumstance we occasionally meet with parts in juxta-position which it would be perfectly impossible to bring near each other during life. If we read La Motte and other great records of difficult labours, we do not find a word of any other species of faulty presentation besides that of an arm or shoulder, except where the child was born prematurely or dead, or where turning had been previously attempted by some awkward hand without success.

Numerous lists of causes, inducing faulty position of the child, have been enumerated

by various authors, with how much correctness will be seen hereafter. Thus Carus considers that malposition of the child may arise, 1st, from too large a quantity of liquor amnii; 2ndly, from considerable length of the cord, and its being entangled; 3rdly, irregular attachment of the placenta; 4thly, faulty formation of the sides of the superior aperture of the pelvis; 5thly, faulty situation of the uterus; 6thly, violent external concussions of the body, as from coughing, vomiting, &c.; 7thly, plurality of fœtuses. Baudelocque has considered obliquity of the uterus as one of the most common causes of faulty presentation of the child, but this opinion, once so prevalent, has been long since proved to be incorrect. The uterus towards the end of pregnancy is seldom straight, for it is always inclined somewhat more or less to one side of the abdomen, or is, to a certain degree, pendulous. If you watch the abdomen of a woman in labour, where the fundus is rather to one side, you will find that the instant a pain comes on the uterus alters its situation, so that its long diameter corresponds with the axis of the superior aperture of the pelvis; as soon as the pain goes off it returns to its original position. This subject, however, rather belongs to the fifth species of dystocia, where labour is rendered unfavourable from a faulty condition of the soft parts.

Nor was Baudelocque right when he says that a faulty inclination of the pelvis is a cause of malposition of the child. The varieties in this respect which one meets with are very remarkable, thus, only a few days ago, I examined a patient at this hospital where the inclination of the pelvis was so considerable, that the vagina appeared to run straight downwards; and the descending rami of the os pubis to take a course nearly horizontally backwards, and yet she was in her twelfth pregnancy, all her previous labours having been natural. On the other hand, I know of a case where the pelvic axis was actually perpendicular, and yet this patient was the mother of six children, each of which had presented with the head. He also considers a deformed state of the pelvis as a cause of malposition; now when an author so celebrated as Baudelocque asserts this, you will scarcely believe that, in almost every case of the Cæsarean operation, the child has been found with the head downwards, resting on the brim of the pelvis, which was too narrow to allow it to pass. If deformed pelvis were a cause of malposition of the child, what difficulties would it not add to those cases where it was necessary to perforate, and yet accoucheurs of the greatest experience will tell you that they have seldom or never met with a case where deformity of the pelvis rendered perforation necessary, that the head did not present. One can but be surprised to find what a variety of causes of malposition of the child have been enumerated by authors, which do not exist. Where Baudelocque enumerates an unusually large quantity of liquor amnii as a cause of faulty position of the child, I fully

agree with him, for the uterus being so greatly distended is not able to give that direction to the child's body which it does when there is merely the natural quantity of liquor amnii. It seems more than probable that the first perceivable pains, or dolores præsentantes, have a considerable share in determining the position of the child, for by the pressure which they exert, the long axis of the child is kept parallel with that of the uterus. As long as this is the case, the child presents either with the head or inferior extremities, either of which you know is a favourable presentation, but when the uterus is so distended, these slight forerunners of labour can have no effect upon the child's position.

La Motte, and since him others, have assigned *cough* as a cause of faulty position of the child; all I can say is, that I have seen many cases of severe cough, where the child had presented perfectly naturally, and, at this moment, I do not recollect a case of arm or shoulder presentation where the patient happened to have a cough. But what is more to the point than anything else, Professor Nægele, in twenty years during which he has had charge of the lying-in hospital at Heidelberg, has never yet seen a case of malposition of the child which he could attribute to this cause.

Much dancing and jumping, and other species of violent exertion, have been assigned as a cause, but I know of a case where the woman belonged to a company of strolling players, and used to exhibit upon the tight rope, &c.; this person was brought to bed in the eighth month of pregnancy, during which time I may truly say she had been accustomed to stand almost as much upon her head as upon her heels, and to use the most violent exertions and contortions of her body, and yet with all this the child presented perfectly naturally with the head.

The umbilical cord being unusually short, or rendered so by being twisted round the neck of the child, has been supposed to pull it on one side, and thus make it present with the arm or shoulder, but I know of no case to prove this; in fact, the cord is so often twisted round the child's neck, that I should almost think one half of the children are born with it in this condition. Cases, I own, do occur where it may be twisted so tightly round the child's neck as to cause its death, or where from this circumstance, or its being unusually short, the labour has been considerably retarded; these will be considered under the third species of dystocia, but, as I have before said, I know of no case where malposition of the child has been produced by it.

I am convinced that the position of the child depends very much upon the *form* of the uterus, and in this respect I am supported by Saxtorph, Boer, Wigand, and Nægele, four of the first continental practical authorities in midwifery. Thus Wigand, in a valuable work published after his death, says, "that the original cause of faulty presentation of

the child lies in the deviation of the uterus from its regular elliptical or pyriform shape." The first contractions, or dolores præsentantes, are those which regulate its shape; thus in a uterus for the first time pregnant, they generally act equally on all sides, hence it is why in primiparæ the uterus is so exactly oval, and why we so rarely meet with faulty presentation. "The first labour pains," says Fielding Ould, "which are very short, continue their repetition for two or three hours, or perhaps for more, before there is the least effort produced upon the os tincæ, *which time must certainly be employed in turning the head towards the orifice*, which being completed, the waters begin to gather." It is curious that this remark, made nearly a century ago, should not have attracted more notice, and Ould has the more merit, since, till he published in 1742, scarcely any attention had been paid to the mechanism and other phenomena of labour. If the dolores præsentantes act irregularly, or the uterus has a disposition to spasmodic affections of its muscular fibres, one side of it may be firmly contracted, while the other is quite loose, hence it will be drawn down unequally, and form a large pouch on one side; the result of this faulty configuration of the uterus is that the position of the child becomes changed, so that its long axis does not correspond to the axis of the pelvis. On questioning women who have had difficult labours, on account of arm or shoulder presentations, they will almost uniformly tell you that, during the latter part of their pregnancy, they have suffered considerably from cramps and spasms at night time, and frequently describe the abdomen as being drawn into lumps. It is Professor Nægele to whom I am indebted for the knowledge of this curious fact, and I have had several opportunities since of proving the correctness of it. The following account, which he gave me, serves to illustrate this point very remarkably: it was the case of a woman who had borne five times, and each time the child had presented with an arm or shoulder; turning of course was necessary in every labour; only two children were born alive, and these were unfortunately afterwards carried off by the small-pox. Being pregnant for the sixth time, she was exceedingly anxious that if possible the life of this child should be preserved, and he was requested to attend her. He found her perfectly well made, but, on inquiring into the history of her previous labours, he found that she had suffered extremely from cramps and spasms during the latter months of each pregnancy. Having tried opium by itself, or combined with ipecacuanha or valerian, without effect, he ordered her a starch injection with twelve drops of tinct. opii. every night as long as she continued to suffer from these attacks; the spasms soon ceased, nor did they appear again during the remainder of her pregnancy, and my friend had the satisfaction of dea

livering her at the proper time of a living child, which presented in the natural manner.

Dead children, as I have before told you, gentlemen, are *no* rule for presentations, for they come any how. It is astonishing how quickly the child becomes soft after its death in utero. When it has been some little time in this condition, it becomes so closely packed into a round ball by the general pressure which the uterus exerts on all sides of it, as to be truly surprising, so that in trying to turn in such a case it becomes very difficult to distinguish what we feel, for we find parts, which are usually at some distance from each other, now in such close apposition as to completely mislead and puzzle us.

The signs of a faulty position of the child are various and uncertain; flatness of the abdomen has been considered to denote it, but this may also show the presence of twins or much liquor amnii; in thin subjects, where the head does not present, it may be sometimes felt externally through the abdominal parietes, but this is by no means uniform. In cases of eutocia, where the head presents, it may be felt as early as the seventh month, hence in dystocia, from malposition of the child, we shall not be able to feel it. Still this is no proof of faulty position, because it may be a presentation of the nates; nevertheless, on examining per vaginam fourteen days before the patient expects to be confined, if we do not feel the head presenting, we should be prepared to suspect that all is not quite right. In a woman pregnant for the first time it is a bad sign, because in these cases the head of the child, as you know, is situated so remarkably deep in the cavity of the pelvis; but even under these circumstances our not being able to feel the head is no proof of malposition, for it may so happen that the pelvis is narrow, and thus prevents the head from entering the cavity, or, as I have before said, it may be a presentation of the nates, for the nates, you will recollect, do not sink so low into the pelvis as the head does, nor is it a faulty position, since the long axis of the child corresponds with that of the pelvis. In women also who have already had children, the head does not sink so low in the pelvis towards the end of pregnancy as in primiparæ, a circumstance which probably arises from a portion of the cervix uteri still remaining; in cases where the woman has had as many as ten or twelve children, you will occasionally feel the head so high in the pelvis that it will be difficult to reach it. I have sometimes met with cases of this sort, where I have not been able to feel the head until the membranes were ruptured, and then it seemed, as it were, to come down from a height; nevertheless, the not being able to feel the head at the beginning of labour is a bad symptom, and should put us on our guard. "If on examination," says Dr. Merriman, "it should be ascertained that the os uteri is considerably dilated, and the child cannot be

felt, this affords reason to suspect that the presentation is preternatural; should the liquor amnii be discharged, and the child be out of reach of the finger, the probability of a preternatural presentation is greater." Hence it requires us to be exceedingly cautious in forming our diagnosis, nor can we be quite certain until we are able to feel the arm or shoulder per vaginam.

The power of distinguishing the various extremities and parts of the child can only be acquired by practice; it is impossible to describe these parts, for a description of their appearance gives no idea of their feel. Madame la Chapelle has made a similar observation. A friend of mine, who is remarkable for the fineness and accuracy of his touch, was led to try the following expedient:—he tied up the body of a still-born child in a large bag, and, cutting a small hole, introduced his finger to examine the presenting part; and he assured me that he had found great advantage from this method.

In a case of faulty presentation, if nothing be done by the accoucheur, the arm or shoulder becomes gradually more and more wedged into the cavity of the pelvis. As long as the child is alive, the arm grows black and swells to such a degree, that one would almost imagine it belonged to a child five or six years old. If no assistance comes, the active pains gradually cease, and the uterus remains in a state of continued contraction, amounting to a species of stricture. The whole abdomen becomes very tender, the pulse quick and hard, the skin dry and hot, the countenance flushed and anxious; the vagina will be found dry, without any mucous secretion, excessively tender to the touch, and so hot as to produce even a sensation of tingling to the finger; the lips of the os uteri are sometimes so swollen as even to be liable to be mistaken by an unpractised hand for the membranes distended with liquor amnii; in fact, all the symptoms of inflammation come on, which are quickly followed by gangrene; or, during the height of a pain, the patient suddenly shrieks out with intense agony, she complains of a sense of bursting or tearing within her; the pains cease instantly, followed by overpowering prostration of strength; the pulse becomes small, and so rapid as not to be counted; the extremities cold, the eyes glassy, the features collapsed, the abdomen generally swells with tympanitis, the slightest pressure brings on intense pain, and death mostly follows in the course of from twenty-four to forty-eight hours.

I need scarcely tell you, gentlemen, that the symptoms which I have now enumerated are those of *rupture of the uterus*.

"When a rupture of the uterus has really happened," says Dr. Douglas, "it is generally marked by symptoms which are decisive; but, its being a case which occurs so rarely, they do not immediately create suspicions. When labour has continued violent a considerable time, if a pain expressive of peculiar agony be

followed by a discharge of blood and an immediate cessation of the throes, there is reason to apprehend this mischief. If nausea and languor succeed, with a feeble and irregular pulse, cold sweat, retching, a difficulty of breathing, an inability to lie in the horizontal posture, fainting, or convulsions, there is reason to suspect the nature of the case. But if the presenting part of the child, which was before plainly to be distinguished, has receded and is no longer to be felt, and its form and members can be distinctly traced through the parietes of the abdomen, there is evidence sufficient, I believe, to determine that the uterus is ruptured. The labour-pain, in consequence of which the rupture is supposed to have happened, is often described by the patient as being similar to cramp, and as if something was tearing or giving way within her; it has been said, likewise, to have produced a noise which could be heard by the people present."

This brings me to the consideration of what has been called the *spontaneous evolution* of the fœtus, or that means which we occasionally observe nature adopts to expel a child which has presented with the arm or shoulder. This fact was first noticed by Dr. Denman, who was of opinion that in proportion as the head and upper extremities were gradually forced towards the fundus by the continued action of the uterus, the nates descended into the pelvis, and in this manner the child was born. Dr. Douglas, in a pamphlet which he published upon the subject in 1811, considered that Dr. Denman's account of the spontaneous evolution of the fœtus was incorrect, and that the arm and shoulder do *not* return into the uterus, but gradually sink deeper into the pelvis, and, together with the side of the pelvis, protrude through the os externum. Thus the side of the trunk comes to press on the perinæum; this makes room for the breech to descend from the brim of the pelvis into the hollow of the sacrum, and by a few further efforts of the uterus the rest of the body and lower extremities is expelled, leaving the head and one arm still to extricate. "If," says Dr. Douglas, "the arm of the fœtus should be almost entirely protruded with the shoulder pressing on the perinæum; if a considerable portion of its thorax be in the hollow of the sacrum, with the axilla low in the pelvis; if with this disposition the uterine efforts be still powerful, and if the thorax be forced sensibly lower during the presence of each successive pain, the evolution may with great confidence be expected." The correctness of these views has been fully confirmed by the late Dr. Gooch, who had an opportunity of watching a case of spontaneous evolution, or rather expulsion, as it should be properly called, under peculiarly favourable circumstances. "The patient was a tall young woman, at the full time with her first child. She had had slight pains during the night; about four in the morning the membranes had broken, and she had sent for the midwife. From her I learnt that, when she arrived, the

orifice of the uterus was somewhat open, but that no part of the child could be felt; at length the pains became stronger, an arm descended, and she had sent off for further assistance. The first thing I observed was that not only the arm was out its whole length, but that the shoulder had turned forward under the arch of the pubis, like the occiput after the head is born. The next thing I observed was that when a pain came on, which was very strong, the side of the thorax pressed down with great force against the perinæum. Struck by these appearances I abstained from turning, and sat down by the bed-side, fully expecting what actually took place, the spontaneous expulsion. Resolved to know what became of the arm, if this should happen, and thus fit myself for a witness on this disputed point, I laid hold of it with a napkin, and watched its movements. So far from going up into the uterus when a pain came on, it advanced, as well as the shoulder, still forwarder under the arch of the pubis, the side of the thorax pressing more on the perinæum, and appearing still more externally. It advanced so rapidly that in two pains, with a good deal of muscular exertion on the part of the patient, but apparently with less suffering than attends the birth of the head in a common first labour, did the side of the chest, of the abdomen, and of the breech, pass one after another in an enormous sweep over the perinæum, till the nates and legs were completely expelled. The head and arm were still to be extricated, but this was effected with the greatest ease. The child was dead; the mother had not felt it move since the day before at noon; not only was the cord without pulsation, but it was empty and shrunk, and looked as if it had been some time since blood had circulated through it. The side of the chest which had come foremost was of a livid-green, the skin peeled off, and the naked cutis was dark-brown; the child was large, and the pelvis not unusually spacious.

The spontaneous evolution can only occur where the child is dead, and will seldom happen but where there has been delay in sending for proper assistance soon enough. Dr. Douglas, who had several opportunities of observing the spontaneous expulsion of the fœtus, says, "the reader will probably be somewhat surprised, on the perusal of these cases, at the short time in which the completion of each was effected,—in none exceeding six hours. I know the prevalent opinion to be, that such a process only occurs in a very protracted labour; but although the duration of labour in these was comparatively short, yet the expelling power exerted by the uterus in each case was, and ever must be, on every similar occasion, prodigious, nor can any other event ever be calculated upon than that of a still-born infant." I cannot, however, agree with him, where, in the next page, he says, "I will venture to affirm that one-third, at least, of all cases of cross birth should not be subjected"

to the operation of artificial turning;” because although it may be stated, on an average, that not more than one-third of the children which are delivered by turning are born alive, still, as long as no peculiar difficulties present themselves to render turning dangerous, and there are no distinct evidences of the child’s death, I cannot think that a practitioner is justified in waiting for this violent effort of nature. On the other hand, where the passages are well dilated and the pains very powerful,—where the shoulder has entered deeply into the pelvis, and the prolapsed arm gives undeniable proofs that the child is dead,—I should certainly be inclined to wait for the spontaneous expulsion; but under any other circumstances it is exposing the child to certain death, and the mother to extreme danger. There can be no doubt but that in cases of *very* difficult labour the spontaneous evolution of the fœtus is a most fortunate occurrence for the mother, but not for the child.

But to return to the treatment of a case where the arm or shoulder presents. It has been supposed possible that, when the head is high above the pubes, we might guide it either into the pelvis or towards the fundus, by pressing upon it externally through the abdominal parietes. Wigand of Hamburg tried this practice, and Dr. W. Hunter used a similar plan where he attempted to turn the fœtus with the nates into the pelvis. The most important complications of malposition of the child are with a contracted pelvis, or stricture of the uterus. By stricture of the uterus I mean that violently-contracted or almost tetanic condition of the uterus, which not only renders the child immoveable, but makes it almost impossible to introduce the hand for the purpose of turning. This latter complication is by far the most dangerous. Where the liquor amnii has escaped some time it increases the danger and difficulty immensely, the uterus contracts tightly upon the child, and inflammation, rupture, &c. are apt to follow. Suppose, for instance, gentlemen, that you are suddenly sent for to a case of this sort; on arriving at the patient’s house, you find that the liquor amnii has escaped some hours; the arm in the vagina is quite livid, and so much swollen as to prevent your introducing the hand to search for the feet; the uterus is hard and contracted, and the least attempt to pass up your hand produces intolerable suffering, or perhaps even convulsions. Moreover, you find that the accoucheur who sent for you has already tried to turn, but without success. What are you to do?—bleed. Venesection is here a *mighty* antispasmodic, and is most strongly, most imperiously, indicated. I have known of cases where it was impracticable to introduce even a finger between the child and passages, and yet after the relaxation, or even syncope, produced by a full venesection, the hand has been introduced with comparative ease, and the turning safely and successfully completed. “Blood-letting,” says Dr. Dewees,

“is the only remedy with which we are acquainted that has any decided controul over the contracted uterus. It is one almost certain of rendering turning practicable under such circumstances, if carried to the extent it should be. A small bleeding in such cases is of no possible advantage, for unless the practitioner means to carry the bleeding to its proper limits, which is a disposition to, or the actual state of, syncope, he had better not employ it.” Nature herself clearly points out the necessity of active and decided blood-letting to relax the uterus and external parts. “The vagina,” says Wigand, “is never so soft, so dilatable, and capable of admitting the hand, as during the presence of an active hæmorrhage, and this is equally the case in primiparæ as in those who have had several children; and it is a mistaken kindness in the medical attendant, who, in order to spare his patient’s sufferings under these circumstances, delays to introduce his hand until the hæmorrhage shall have ceased. The moment this is the case the vagina regains more vitality, sensibility, and power of contraction; the hand now experiences much more opposition, and excites far greater pain than during the state of syncope.” My father, in his Essay on Uterine Hæmorrhage, makes a similar observation:—“If the discharge be small, and more especially if it be the patient’s first child, and the parts be close and unyielding, the admission of the hand into the vagina will be attended with the utmost difficulty, and perhaps be almost impracticable; in this case let us wait (but let it be with the patient) till the discharge increases, or has continued long enough to relax the parts; for certainly if the woman be able to bear losing a little blood, which at first she may safely do, the examination will be thereby rendered more easy, and the turning of the child be more practicable and safe.”

Besides venesection, we should also try the warm bath, and neglect no means by which we may calm the mind of our patient, for this is of great importance. To diminish the spasmodic action still further, an opiate injection will be advantageous. In the state of vehement contraction in which the uterus was before the bleeding, turning was not only nearly impossible, but strongly contra-indicated, for, attempting under such circumstances to turn, we should have run a considerable risk of rupturing the uterus. When the arm presents, the accoucheur must not lose time by endeavouring to reduce it; he is to slide his hand into the uterus by the side of the arm, and bring the feet into the passage, the arm will by that means return of itself. “An arm presenting,” says Chapman, “and advanced as far as the arm-pit, is *not* to be returned, but the hand is to be introduced (which, as Deventer justly observes, is often found to penetrate with much more ease when the arm hangs down, than when it is thrust back again), and the feet to be sought for,

which, when found, the arm will prove no great hindrance in turning the child." "It is in no case necessary," says Dr. Denman, "or in any wise serviceable, to separate the arm of the child previous to the introduction of the hand of the operator. In some cases to which I have been called, in which the arm has been separated at the shoulder, I have found it a great inconvenience, there being much difficulty in distinguishing between the lacerated skin of the child and the parts appertaining to the mother. The presenting arm is never an impediment of any consequence in the operation, and therefore ought not to be regarded, or on any account removed. Dr. Young, in his Midwifery Lectures, mentions a case where the arm was out for three days, and yet the woman was delivered of a living child.

Although, after all our attempts, if it be still impossible to introduce the hand to turn the child, the case nevertheless still demands that the woman should be delivered. Nothing remains now but having recourse to cutting instruments. We must perforate the chest with the Smellie perforator, and, having made a sufficient opening, must bring away the viscera. This will generally give us sufficient room to introduce the hand, if not, we must try to bring away portions of the child as well as we can. This is no case, gentlemen, for the Cæsarean operation; the system is too much exhausted, and the parts too much inflamed, &c., to admit of it. These extreme cases rarely happen in lying-in hospitals or in large cities, but in the country remote from assistance, and where an ignorant midwife has made the case much worse by pulling at the arm. Madame la Chapelle's excellent observations on this subject deserve attentive perusal. The *pravus fœtus situs*—the vicious, faulty, or mal-position of the child, has not been sufficiently treated on by authors; it has never been made the subject of a distinct monograph, but has merely been discussed cursorily under the chapter of turning. Some authors have described a presentation of the head and arm together; thus La Motte, in his 84th Obs., gives a case of this sort, which terminated by the natural powers. In the *Medical Gazette* for April 19, 1834, you will find two cases described in my Midwifery Hospital Reports, the first one requiring the forceps. Since the publication of these cases I have met with another example of the head and arm presentation, where a considerable portion of the head had entered the superior aperture along with the arm; after a smart pain, the arm suddenly descended, and the head was found to have quitted the pelvis, which was now occupied by the shoulder. It is extremely common to have a hand come down by the side of the cheek, but it does not descend further, nor does it produce the slightest hindrance to the passage of the head. After some years' practice, one meets with complicated and irregular cases, which are some-

times not even described in books; thus, for instance, Professor Naegelé told me of the following case: it was a first labour,—the head was passing over the perinæum, when he remarked a discharge of blood from the anus. He examined, and at about three inches up the rectum he felt an elbow of the child protruding; it had some how come down along with the head, had become entangled in the vagina, and forced its way through into the rectum. When the child was born, he examined the vagina, and found a laceration of the posterior wall, corresponding to where he had previously felt the elbow in the rectum. He was at first uneasy about the case, for he feared she would not be able to retain her fœces. He gave her a laxative, and kept her quiet. In two days after, he found the laceration, which at first seemed so extensive, surprisingly contracted, and on the twelfth it was completely healed. This was evidently a complicated presentation of the head and arm, and belongs to those cases which are among anomalies of the rarest description, but with which, nevertheless, it is necessary you should be acquainted.

As to the complication of the head with both arms, we have no example of it in the experience of our great practical authorities, Mauriceau, La Motte, Smellie, and La Chapelle: it only exists in the copper-plates of certain works on midwifery: nor can that position of the child exist in nature where the feet and head are wedged together into the pelvis; but I will not deny that it can be *made* during an unsuccessful attempt to turn; the feet may have been even pulled down into the vagina, and yet the head has not quitted the pelvis. When you are called to a case of this sort, what would you do? The accoucheur tells you that he has tried several times to turn, but could not succeed. The first thing to be done, as the system is more or less excited, is to bleed, followed by warm fomentations to the abdomen, and an opiate injection; then try to pass a noose round the feet, and when this is done, we may safely push up the head, and the feet will soon descend. I had a case of this kind occur last year;—a pupil was turning the child; he had reached the feet, and brought them down; but the head had not sufficiently quitted the pelvis, so that at last the child became completely fixed. I passed a tape round the feet, and then introduced my hand. I found the head deeply imbedded in the venter of the left ilium, and it required some little force, as well as management, to push it up.

Reviews.

The Influence of Minute Doses of Mercury, combined with the appropriate Treatment of various Diseases, in restoring the Functions of Health, and the Principles on which it depends. By A. P. W. PHILIP, M. D., F.R.S.L. & E. 2nd Edit. Renshaw.

THE author states that it is almost thirty years ago since he commenced his observations on the effects of minute doses of mercury in the cure of disease. During the whole of the intervening period, until a twelvemonth ago, the results of these observations had never been embodied in a separate or palpable form. They are, however, now presented to the public, with additional experience, and whether the principles of practice adopted by Dr. Philip be rational and useful, requires, as a demonstrative proof, positive experience. Whether certain diseases are curable by a scruple of calomel exhibited at variable intervals, or to be treated by one-third or half-a-grain of blue pill two or three times a-day, is not the question. Is calomel an useful therapeutic agent?

Undoubtedly! There is not assuredly a single individual in the profession who would negative the interrogation. But the cases in which it is desirable that its administration should be resorted to, would give rise to diversity of opinion, and consequently opposition. To arrive at truth, it is often necessary to steer between two extremes. In what doses calomel should be exhibited, again affords a theme for discussion. Would a scruple dose be equally efficacious in a chronic affection as in Indian cholera? Decidedly not, would be the response of an educated practitioner. The dose of a medicine must be modified according to the affection it is to remove—when power is required, it must be employed. This is an axiom in mechanics. A dray-horse would not “win a race at Epsom,” nor a full-bred racer draw a load of beer barrels. The ostensible object of this work is to prove that the employment of mercury is too much abused; that many cases in which it is administered are unfit for its employment; and to teach us the *modus in rebus*—“a consummation devoutly to be wished.” We run into extremes; we ride our hobby to death; or, to say the least, we exhaust him; so does, we fear, Dr. Philip. Mercury is one of our most potent medicines; it can really work miracles, when judiciously applied, and so can some other medicines. There is still one consolation, that in the doses prescribed by our author we can seldom err. One-third or a half of a grain of *Pilula Hydrargyri* is recommended in those horrid *chronic* affections—those enigmas in medicine. The section allotted to the *modus operandi* of mercury on the capillary system, exhibits some clearness of head—some what the poet would designate “*imagination vivid.*” Let us see

how he handles his weapons. Not before have they been properly appreciated.

“Its operation is, more or less, that of a stimulant; for, according as circumstances direct it to particular organs, we find it exciting them to an increased performance of their functions. While it retains the active form in which it is introduced, it seems incapable of remaining in the system. If it be prevented from running off by one excretory, it finds its way by another; thus we see it exciting the skin, kidneys, salivary glands, &c. Like all other metals, in its metallic and insoluble form, it is inert. In the state of quicksilver it may be freely drunk without any inconvenience but that which is occasioned by its weight; and it can only remain in the system when deposited in the cellular substance in that form, to which it is reduced by the chemical powers of the constitution; for, in whatever state it is given, these powers always reduce it to its original metallic form. It is well known that gold and silver are amalgamated with mercury, if worn by a person whose system is impregnated with it.

“When taken internally it is doubly applied to the stomach and bowels, immediately, and through the medium of the circulation, for we often have to contend with its irritating effects on the alimentary canal, when it is only introduced by the skin. In this canal and the salivary glands alone, its passage excites sensible irritation, which, if considerable, causes inflammation; in the former only superficial, and generally in a slight degree, but in the latter often such as to affect all the neighbouring parts.

“In both cases, as it generally increases the natural secretion of the parts affected, the increased discharge, like all other discharges, tends to relieve the inflammatory action; it is where the discharge is least—that is, where there is some impediment to the free operation of the mercury in increasing the secretion from the part—that the inflammatory tendency is greatest.

“Such are the more prominent effects of mercury introduced into the system; but I have, in my *Inquiry into the Laws of the Vital Functions*, been at much pains to point out that there is no agent capable of affecting the living animal body, that does not possess both a stimulant and sedative power with respect to it, according to the degree in which it is applied, and the state of the body at the time of its application; the stimulant arising from the less, the sedative from the greater, application of it; and that the degree in which agents possess the stimulant and sedative power, although in the same agent always in the same proportion to each other, is, in different agents, in no determinate, but every possible, proportion. Thus, spirit of wine possesses a great degree of stimulant, compared with its sedative tendency, which only appears when it is taken in excess; while tobacco possesses a great degree of the sedative, and little stimu-

lant tendency, which appears only when it is applied in a very minute quantity.”

These are but a few illustrations of mercurial agency on the system, and of its *modus operandi*.

We are limited to its application in disease, to the cases in which it should and may be administered appropriately. In chronic diseases, and in cases where there is organic change, slow in their origin, progress, &c. it is peculiarly applicable in the dose of one-third or one-half of a grain per dose *ter* in die. In many cases such a practice may be highly serviceable; in many others it may act as a placebo. Nevertheless, there is so much fairness and candour in this little book, that we think its perusal will be highly useful to medical men.

The Sphygmometer, an Instrument which renders the Action of the Arteries apparent to the Eye. The Utility of this Instrument in the Study of Disease. Researches on the Affections of the Heart, and on the Proper Means of Discriminating them considered, being a Memoir presented to the Institute of France. By DR. JULIUS HERISSON; with an Improvement of the Instrument and Prefatory Remarks by the Translator, DR. E. S. BLUNDELL. London: Longman and Co. 1835.

We remember a story of an ingenious mechanic who attempted an improvement on the corkscrew; he added to the original a series of levers, wheels, screws, and other mechanical contrivances, and when he had completed his instrument, he found that it would draw a cork *nearly as well* as the original! Dr. Blundell introduces to the British public an instrument for measuring the conditions of the pulse, as the invention of an ingenious Frenchman, with improvements by the translator, as the title informs us. The translator is even more sanguine of its advantages, and more eloquent, than the inventor of this instrument, but we estimate it in the manner the new corkscrew was received, as ingenious, and one which would enable us to ascertain the conditions of the pulse *nearly as well* as by the old method,—palpation. When we have said thus much, we have accorded to it all the merits, if not more than the merits, it deserves; at least, if the proofs already adduced are to be the data from which we are to draw the inference.

The following is the description of the sphygmometer modified and improved by the translator.

“The apparatus must be made as light as possible, either of silver, ivory, or steel; it acts somewhat on the principle of a screw pincushion, which it slightly resembles in shape; it is fixed upon the arm in the same manner as the pincushion is made fast to the table, *viz.* by a spiral screw; this screw has upon its

point a tabular circle, which, being free, moves independent of the screw, and allows the latter to be regulated without disturbing the former when in contact with the wrist, whilst the instrument is being adjusted over the artery.

“The sphygmometer is passed through an orifice or slit, prepared for its reception at the end of an arm, of an elliptical form, being round at the upper and quite flat at the under surface, to prevent it from turning round*; this arm slides horizontally into an aperture which is adapted with the utmost nicety to receive it, and possesses the advantage of being adjusted at any point to which it may be required, by means of a small screw placed vertically over it, which, when turned, firmly fixes the arm of the apparatus into the aperture, and prevents it from advancing or receding, except at the will of the operator.”

This instrument being merely adjusted over the radial artery is to indicate the varied conditions of the pulse and of the heart with an unerring certainty, to raise medicine into the rank of an exact science, to give an accurate theory of the pulse, and to aid us remarkably in simplifying the nomenclature of the diseases of the heart. The author fondly hopes that many affections not recognisable by our present diagnostic measures, may be elucidated by this instrument. We heartily hope for so important a result, but doubt its accomplishment by such means. Disease is not displayed by one symptom, but usually by many; the practice of feeling the pulse, and of deciding upon this symptom alone, is too far East for its adoption in Europe. Nevertheless we would not check the exertions of properly directed industry, or endeavour to repress the enthusiasm of a mind whose object is to benefit science and thence the community. That would be uncharitable indeed; let us rather foster such spirits, that one day something useful may emanate.

The succeeding are some of the results connected with this instrument.

“*Organic Lesions.*—Auriculo-ventricular contractions at the right side of the heart, and auriculo-pulmonary contractions. 22 cases. *Character of the pulse and sphygmometric signs.*—Small, irregular, unequal, intermittent, and at times imperceptible. The column of mercury does not descend to the point from whence it started, or descends to it only in two periods. Near the middle it is surprised by an incidental impulsion. *Necroscopic examination.*—Contractions of various kinds, and dilatations of the auricle and ventricle in a more or less forward state. A little hypertrophy was observed in the right ventricle of four individuals. *Observations.*—In eight of these patients auscultation furnished only a slight

“* The first idea which suggested itself to me was to have the apparatus made on the principle of a bracelet, but the great difficulty of keeping the sphygmometer in a vertical position induced me to abandon it.”

bruissement. In six, the *bruit cataire* was distinctly marked; in the other eight there was no abnormal sound. Oppression, and a more or less decided alteration of the features and colour of the face were the only symptoms which might have raised any suspicions of the disease. Four patients died of pulmonary apoplexy, the rest in a state of general infiltration.

Organic lesions.—Auriculo-ventricular contractions on the left side of the heart, and ventriculo-aortic contractions. 27 cases. *Character of the pulse and sphygmometric signs.*—The pulse is feeble, irregular, intermittent, unequal, but much more so than in the contractions of the orifices on the right side. The column of mercury in the sphygmometer descends below its level one, two, and even three degrees, according to the importance of the obstacle. *Necroscopic examination.*—In 12 cases the heart was not affected with hypertrophy, but merely dilated; in the other 15 there was a beginning of hypertrophy of the left auricle and ventricle. *Observations.*—In the first twelve the pulse was extremely feeble; the patients died of hydrothorax, in a state of general infiltration. Of the remaining fifteen, eight sunk under hæmoptysis, five died of various affections of the lungs, and two of cerebral hæmorrhage. The pulse of these fifteen patients was hard, frequent, and brusque, but offered only a very inconsiderable development.

Organic lesions.—Hypertrophy of the heart, without any contraction of the orifices. 18 cases. *Character of the pulse and sphygmometric signs.*—Pulse regular but unequal in contractions. It presents this anomaly, that the column of mercury, after having ascended a certain number of degrees, we will say three or four, rises suddenly by intervals up to eight, ten, and even fifteen degrees. *Necroscopic examination.*—The autopsy of eighteen individuals, in whom I had observed the stated sphygmometric sign, showed a concentric or excentric hypertrophy of the left ventricle, without any contraction of the orifices. *Observations.*—In those patients who laboured under a concentric hypertrophy the pulse had not the same development as in excentric hypertrophy, but it presented the same character of inequality in its contractions. The signs derived from auscultation occurred in eight cases; in all the others they were so feebly marked that it would have been impossible to recognise an advanced lesion of the heart by those signs.

Thus it appears that certain maladies of the heart are to be predicated with mathematical certainty by one symptom for each malady, this being the extent to which a column of mercury descends in a tube. Some people are good enough to tell us that our profession is raising itself as more scientific than it were wont to be. Surely it will not sink to a purely mechanical art. We may now say with Hamlet, "Oh, Jephtha, judge of Israel, what a

treasure hadst thou!" We can measure the capacity of a man's intellect with a pair of callipers applied to his skull, and we now recognise some of his direful diseases with a column of mercury placed over his pulse.

CIRCULAR OF THE TEACHERS OF ST. BARTHOLOMEW'S MEDICAL SCHOOL.

THE undersigned medical officers and teachers of St. Bartholomew's Hospital beg to address their colleagues in other Hospitals and Schools on a subject of paramount importance to their common profession.

The immense advantages which London possesses for scientific and practical instruction in Medicine and Surgery, have rendered it the great resort of British Medical Students, hundreds of whom repair every year to the Hospitals and Lecture-rooms of the Metropolis, in search of that information which is to qualify them for the exercise of an arduous profession.

It appears to the undersigned, that neither the profession nor the public derive the full benefit of these advantages under the present plans; and hence that it is expedient to revise the method of proceeding, in order to the adoption of such changes and regulations as may render the course of medical study more efficient.

The whole business of medical education, so far as lectures are concerned, is transacted within seven months, from October to April inclusive. During the same period, the majority of Students attempt to accomplish also the important object of practical study at the bedside of the sick.

Two sessions are usually devoted to medical studies in London.

The consequence of these arrangements is, that so many courses of lectures on the various branches of professional knowledge are going on together, as to fatigue the attention, and confuse the mind of the student, leaving him no opportunity for more than a casual and interrupted attendance in the Wards of the Hospital.

This evil would be considerably lessened, if the five months that remain after the close of the Medical Session were devoted to practical study, which might then be pursued without interruption. But it is the custom for Students to leave London when the lectures are ended, and not to revisit it till the beginning of the following Session.

It must be obvious that, under such a system, in which the whole course of efficient instruction, both oral and practical, is crowded into the inadequate space of fourteen months, the best objects of medical education never can be attained.

The undersigned beg to propose for consideration the following plan:—

1st. That the Medical Session should consist of ten months, from October to July inclusive,

leaving August and September for the vacation.

2nd. That the Medical Session should be divided into two equal periods; and that an equal distribution of the lectures should be made between these.

The Hospitals would be open to Students throughout the year, and clinical instruction would proceed constantly. The spring and summer being the most favourable time for attention to Hospital practice, this portion of the year would probably be thought most appropriate for lectures on practical subjects.

The undersigned are aware that a change so extensive as that now proposed could not be adopted by any single School, without great risk of failure. They therefore recommend the subject to the consideration of the Physicians, Surgeons, and Teachers of other Hospitals and Schools, with the hope that some common plan may be devised for rendering the system of medical education in London more suitable to its great objects.

(Signed) P. M. LATHAM, M. D.
 GEORGE L. ROUPELL, M. D.
 GEORGE BURROWS, M. D.
 HUGH LEY, M. D.
 FREDERICK FARRE, L. M.
 WM. LAWRENCE, F. R. S.
 HENRY EARLE, F. R. S.
 EDWARD STANLEY, F. R. S.
 THOMAS WORMALD.

St. Bartholomew's Hospital,
April 13th, 1835.

COLLEGE OF PHYSICIANS.

Proposed Copy of the Statutes to be enacted in February, 1834. Translated from the Parliamentary Report on Medical Education.

Fellowships.

No one can be admitted to the rank of a Fellow who shall not have been a licentiate for the period of a year, after he has been admitted a Doctor in Medicine at the university of either Oxford or Cambridge; and after that he has fulfilled all things prescribed in the statutes of either university without dispensation, or any unusual grace; or after he has taken the degree of Doctor in Medicine at the Dublin University, and has presented to the Registrar letters testimonials, as well from that University of having accomplished all duties there necessary, without unusual dispensation or grace, as letters of his incorporation from either of the aforesaid Universities; or who shall not have been five whole years a licentiate after he has obtained the degree of Doctor of Medicine in either of the Scotch Universities, having first obtained the degree either of Master or Bachelor of Arts according to the form lately prescribed for the Scotch Universities by the royal ordinances; or who shall not have been a licentiate for seven years

after he has obtained the degree of Doctor in Medicine in any Scotch University, according to the form adopted by them hitherto, or in any other Academy.

Amendment in the above.

Or who shall not have been a licentiate for seven years, after he has attained the degree of Doctor in Medicine in any other University.

The Election of Fellows.

There shall be held extraordinary Comitia Majora annually on St. Thomas's day. In these Comitia the Fellows shall be chosen in the following manner:—

The President and Censors shall propose to the College, out of the whole number of licentiates, as many as they wish to be elected in that year, to which if the majority of the Fellows present agree, that shall be the number of licentiates to be elected in that year. But if otherwise, it shall be lawful for any Fellow to propose another number, which being done, to the number decreed by the College each of the Fellows may inscribe on tablets the names of those whom they shall judge the most fit by their learning, science, skilfulness, and morals.

These they shall deposit in an urn placed near the President. The President shall draw out one by one these tablets, after they have been deposited in the urn, and shall read before the Fellows, and declare the names of those who shall have gained the suffrages of the majority of the Fellows present.

But if the suffrages of the majority of the Fellows present shall have been given to fewer than those whom the College should have decreed to have been elected, those to whom the majority has consented shall be considered nominated. Afterwards the Fellows shall give their suffrages again until the prescribed number shall have been completed.

Any tablet which is inscribed with the names of more or fewer licentiates than the number designed, shall be put aside.

The President, at the ordinary Comitia Majora to be held on the following day, shall propose the licentiates so selected for admission, who shall be immediately admitted into our Society, if in these Comitia the suffrages granted to them shall have doubled the number of the third part of the fellows present.

If any licentiates so proposed shall be rejected by the ordinary Comitia Majora, others shall not be proposed in their place that year.

Amendment to the First Paragraph of the above.

The President and Censors shall propose to the College as many out of the licentiates as they wish to be elected that year. If the major part of the Fellows present agree to it, that shall be the number of licentiates to be elected that year, but, otherwise, it shall be lawful to any Fellow to propose another number.

The second paragraph of the above remains unaltered, so also does the third.

Amendment to the Fourth Paragraph of the above.

The President shall propose the licentiates so selected, one by one to be admitted, who, if the suffrages allotted to them by ballot shall double the number of the third part of the Fellows present, shall be admitted into our Society in the Comitia Majora to be held on the following day.

Amendment to the Fifth Paragraph.

If any of the licentiates so proposed be rejected, others in their place shall not be nominated in that year.

If any Fellow practising medicine in the city of London, and within seven miles around it, shall be absent from the extraordinary Comitia Majora held on St. Thomas's day, or from the ordinary Comitia Majora to be held on the following day, he shall be fined for each default twenty shillings, unless for some certain grave cause it should appear otherwise to the President and Censors.—Unaltered.

(The Beadle shall advise annually the Fellows summoned to the Comitia, by a schedule of this fine being imposed.)

We admonish the Fellows that they should declare to the College any licentiate who, either through another one or himself, shall have come to them in any way for the purpose of canvassing, who, if he shall be convicted of this offence, we appoint and ordain that he shall not be eligible into our Society for the space of two years, and we impose upon him a similar punishment as often as he shall thus offend.—Unaltered.

To be added to the Second Statute, De Permissis.

Or who hath not completed the seventh year from his first entering the University of Oxford or Cambridge, and hath completed the 26th year of his age, and hath obtained a licence to practise from either of the above mentioned Universities, and hath presented letters testimonial to the Comitia Minora of having accomplished all things there required.—Unaltered.

Statute for the M.D. of Dublin, who cannot be incorporated at Oxford and Cambridge.

As there are some Doctors in Medicine from the Dublin University, to whom the decrees of the Church of England offer scruples, and who, therefore, cannot be incorporated in the Universities of either Oxford or Cambridge, we appoint that each of them (who hath faithfully assured the Comitia Minora that he hath not sought his incorporation in those Universities for any other cause) shall be eligible into our Society after he hath been two entire years a licentiate.

Provisional Statutes.

We appoint and ordain that all candidates

and inceptor candidates, who shall not have been received into our Society before the day of the ordinary Comitia next, to be held on Michaelmas day, or in those Comitia, shall be considered in the number of licentiates; out of which number, notwithstanding the statutes, they shall be proposed by the President to the Comitia Majora for admission, that each may perfect those things which are prescribed according to the order of candidates.—Unaltered.

Moreover, it shall be lawful to all who, by virtue of the degree of Bachelor in Medicine or Master in Arts, have been examined in the University of either Oxford or Cambridge, and have been admitted in the number of licentiates within the time above mentioned, to be elected in the same manner into our Society, the statutes notwithstanding.—Unaltered.

The names of all these shall be inscribed in a catalogue apart from each other, above the names of the Curators of the Museum; the capital letters C. and I. C. being added to each name, as each may be a candidate or inceptor candidate.

X. Y., C.
T. V., I. C.
O. P., I. C.

In our last we gave a list of witnesses examined relative to the College of Physicians, we here enumerate those examined relative to the College of Surgeons, in the order in which their examination took place.

Surgeons—George James Guthrie, Esq., William Clift, Esq., John Yelloly, Esq., Sir Astley Cooper, Sir Benjamin Collins Brodie, Benjamin Travers, Esq., Sir Charles Bell, Sir Anthony Carlisle, William Lawrence, Esq., James Wardrop, Esq., John Scott, Esq., Joseph Henry Green, Esq., Richard Dugard Grainger, Esq., Joseph Constantine Carpue, Esq., James Somerville, Esq., Thomas King, Esq.

DEATH FROM A SURGICAL OPERATION.

MONDAY week an inquest was held at East Tilbury, before C. C. Lewis, Esq., Coroner, upon the body of John Freeman, aged one month and three days, son of a farming bailiff in that parish. The inquiry caused considerable interest in the neighbourhood, various reports being in circulation tending to imply that the death of the child arose from a want of skill on a young man, assistant to Mr. Warren, surgeon at Gravesend. It appeared that the mother of the child, thinking its tongue was tied, took it to Mr. Warren's, and there saw the assistant, who pronounced the case one requiring the division of the frænum, and accordingly divided it. From that time a continued hæmorrhage took place, the blood oozing into the mouth, and coagulating there.

The mother for some time did nothing to assist the infant except clearing its mouth of the coagulated clots of blood. At last, however, becoming alarmed, she proceeded to Mr. Warren's, and he attempted to stop the bleeding. He was unsuccessful in his attempt to do so, and finally Mr. Robinson, of Orsett, was sent for by the mother. The evidence of this gentleman went to prove, that perceiving caustic had been already had recourse to without success, he applied the actual cautery. He did so twice during four hours, but in vain; the bleeding continued, and he gave up the case as hopeless. He added that the operation of cutting the frenum linguæ was a very delicate one, and from the slightest movement of the child during its performance a mischance similar to that under consideration might occur, more especially if, as was sometimes the case, the ranial artery ran more superficially than usual. The jury, guided by this opinion, returned a verdict in favour of the assistant.

PLAGUE IN EGYPT.

By accounts up to the 25th of March, the ravages of the plague were on the increase at Alexandria. The victims were too numerous to ascertain the daily mortality. *The sanitary cordon being found useless was raised.* People fell dead in the streets. In the Semnat, the Arabs employed in arranging the cotton perished on the spot. The disease had penetrated into the quarter of the Franks, and many ships were implicated; among these two English, one French, and several Greek. The victims are estimated at 100 per diem. Commercial affairs were at a stand at Alexandria.

Foreign Medicine.

Experiments to ascertain whether the Plague be, or be not, contagious.—Answer of the Minister—Reply of M. Chervin.

We promised to give the analysis of the Minister's answer and M. Chervin's reply. It is thus:—

The Minister, in his answer of February 10th, first compliments M. Chervin on his devotedness to the subject, and reminds him that in 1825 three Physicians, MM. Lassiss, Costa, and Lasserre, made a request similar to his own, relative to the Yellow Fever and the Plague; and in like manner proposed to dress themselves, in the Lazaretto of Marseilles, in the very garments of the infected; that the Academy made strong objections to that proposal, as well on the score of its legality, as its danger, and the results to be expected from it. "In order to be decisive," says the Minister, "the experiment should be made on a number

of persons, which number the Academy refused to specify. Now it is evident that the chances of danger, whatever they may be, will increase in direct proportion to the quantity of pestiferous garments necessary to be obtained, and in proportion, also, to the number of persons trying the experiment. On a question, then, so delicate," continues the Minister, "of such import, not only to the public health, but to the interests of the commercial relations of the city of Marseilles, I think Government is not justified in deciding, without the concurrent opinions of those bodies which are the organs and natural representatives of those interests. I therefore cannot give further attention to your request, until I have communicated it to the municipal authorities at Marseilles, and, afterwards, of the result of this communication I will not fail to inform you."

To this M. Chervin replies, that he did not allude to the petition of MM. Lassiss, Costa, and Lasserre, in 1825, because the subsequent judgment of the Academy, in 1830, on the means of disinfection proposed by M. Paillette, appeared to him of infinitely more importance, the ideas relative to contagion being since then much modified.

That as to the objections raised by the Academy, in 1826, he answers, that clothing, merchandize, and travellers, supposed to bear about them the principle of contagion, are daily brought into the Lazaretto, and even actual sufferers under the Plague itself, with impunity. Of what use, then, are the Lazaretto? Again, the sanitary regulations require that men *in health*, the porters who open the bales, should thus put themselves in immediate and repeated contact with objects supposed to be the most strongly impregnated with the contagious principle. Now, for more than the lapse of a century no instance has occurred of a porter being infected with the Plague in the Lazaretto of Marseilles—that pretended *Palladium* of public health; and in 1834 605 of those men were sent thither to purify merchandize, that is to say, to put themselves for thirty, forty, or fifty days together, in immediate contact with pestiferous objects, so supposed. How then will the legislature prevent the introduction of really-infected garments into the Lazaretto of Marseilles for the sake of experiment?—the only way, according to the Academy, of solving a question so deeply interesting to the cause of humanity! And if a law be necessary to authorize such introduction, the Minister can obtain it from the proper authorities.

Respecting the danger of the experiment, M. Chervin remembers well, that in 1825 a great majority of French physicians, and of those of the Academy, believed the yellow fever contagious; the documents which it submitted to that Society have changed that opinion, as is evident from the Academy's report on these very documents in 1827.

The Academy feared that a chest containing contaminated effects might burst in its passage

and infect the ship; but the existence of the poison is the point of contention; the effects of the rupture of the chest may be prevented by envelopes of waxed cloth.

The fear of seeing the *volatile poison* of the yellow fever, against which a lazaretto was created out at sea (the Islet of Ratoneau), cannot exist with respect to the plague, the poison of which, according to the contagionists, is heavy, viscous, very tenacious, and transmissible only by immediate contact. M. Chervin, contrary to the opinion of the Academy, thinks that the certitude of the contagion would not be too dearly bought by the lives of all the experimentalists.

Relative to the result of the experiments, the Academy has its doubts whether the contagious principle would not be weakened by long exposure to the free air; to obviate which M. Chervin would have *the apparel collected at the precise moment of death, and enclosed in cases hermetically sealed, the substance of which could have no action on the poison*—wood, for example. The miasma of the plague, observes M. Chervin, cannot be weakened or destroyed during the short voyage from Alexandria, since that of the yellow fever, said to be volatile, comes from a country far more distant.

A trial by three individuals only, and their escape from contagion, would not satisfactorily settle the question, says the Academy. In this opinion M. Chervin joins, having at the same time no doubt but that hundreds would coalesce with him in making the experiment. Besides, with contaminated apparel *accidentally* brought into the lazaretto, the Academy thought the experiments might be made; from which it appears that the proposal of MM. Lassis, Costa, and Lasserre, had been only partially rejected.

The danger anticipated by the Minister in the accumulation of contaminated apparel sufficient for a number of experimentalists, applies not, in the opinion of M. Chervin, to the lazaretto of Marseilles, which is 232,762 metres, 61 centimetres superficie, and in which the infected have often been admitted without any fatal result to the public health.

M. Chervin then proceeds to point out the manner in which the experiment is to be made.—“In a very confined and close chamber,” says he, “the case will be opened, containing, according to the certificate of its contents, the garments most affected; these very garments I myself, and solus, shall put on, having previously washed myself from head to foot with soap and water, for the purpose of facilitating and quickening the absorption of the pestilential virus. If at the expiration of fifteen days I find no result, but feel as well as ever, two other experimentalists will proceed exactly in the same manner as I had done; and at the end of fifteen days, without result of suffering, five other persons will submit themselves to the same process for one day; and then, if the articles supposed to be

infectious still preserve their innocuity, the number of persons will be progressively increased, until the whole destined for the experiment shall have passed through the same ordeal. Thus the lives of a few individuals only will be exposed, without the slightest risk to the public health; since, from the precautions I have indicated, it is clear that the cases of infection which might arise during the experiment would be far less in number than those which commerce has many times introduced into the lazaretto, without resulting danger to the surrounding population; though it is said that, occasionally, some of those persons employed about the sick of that Establishment have been infected with the plague. Be it also observed, that individuals in the yellow fever have been admitted there at different periods, and especially in the years 1802-4 and 1821, without any bad effect resulting from their admission. The number of yellow fever cases in the lazaretto last year amounted to twenty-five.

“In short, should the slightest fear arise relative to the persons performing quarantine, when about to enter on the experiment, it will be very easy to send them to the Lazaretto, in the Islet of Ratoneau, which thus may be turned to some little account. As to the porters, whose office it is to purify the merchandize, they are in daily contact with pestiferously contaminated objects, so esteemed; besides which, they are perfectly sequestered in their respective domiciles.”

Finally, M. Chervin endeavours to prove that the commercial interests of Marseilles cannot suffer by these experiments, and rests in support of his opinion on M. Villeneuve's “Statistics of the Rhine,” published in 1826, and on the corresponding sentiments of the Secretary of the Council, and also of the Board of Health, both which gentlemen, in truth, manifest small sympathy with the public inquietude, when apprehension exists of the Plague's being in the Lazaretto. To conclude, M. Chervin, in unison with the Academy's dicta of 1826, is of opinion, *that it would be worthy of France to accept these proposed experiments*; and earnestly hopes that the Minister may sympathise in the generous enthusiasms of M. Gay Lussac (*July, 1833, Academie des Sciences*), and no longer oppose efforts so useful to humanity.

EMPIRICISM IN THE COLONIES.

Extract from a Letter addressed to M. the Baron Alibert, September, 1833.

IN most of our colonies, a physician, just on his first arrival, becomes an object of general infatuation; but this favourable disposition quickly changes into general indifference, a tendency of mind which seems endemic in these climes: to expect, indeed, to excite and sustain any very lively interest in the minds of beings rendered apathetic from heat, might be somewhat injudicious; but, though withheld from the man of sense and science, it is ever

felt and expressed towards the grossly ignorant—towards beings who cannot combine two ideas, even if they had two to combine.

Nowhere does empiricism display itself with more audacity than in the town from which I write. This hydra of a hundred heads—this Proteus, which takes in turn every possible form, takes here in chief the feminine form; and in this form has its greatest number of adepts, and also its most renowned; sometimes it is a white, pale-faced, languishing Creole, of graceful aspect and slow utterance, sometimes a stern-looking, massive Mulatto, but more frequently, and ten times more effectively, an old hag, black as midnight, a toothless, decrepid, wretched Negress, whose influence fails not to become paramount and despotic. Wherever there is illness of any kind, there flock these many-coloured empirics; if the indisposition be slight, and in the head, cold water; if there be any appearance of bile, plenty of medicine and vomits;—such is the ordinary treatment in such cases. But if the affection announces itself by alarming symptoms, then a physician is called in by the friends of the patient, for conscience sake only, observe you;—nor are the sisterhood averse to this, since it shelters them from all responsibility. On the first appearance, then, of a serious case, the physician has the upper hand: he commands, and is obeyed, but it is only for a time; for if, after the lapse of two or three days, the malady still exists, woe unto the physician and his patient! The reaction of the tribe takes place, and, thanks to the right they have, or take even when strangers to the family, they penetrate without ceremony into the very chamber of sickness. A consultation of these feminine medicatrices is then sometimes held, and much in this way:—

“The complaint is in the bowels, I see.”

“No, it is under the ribs!”

“It is more like the spleen, swelled by the bile!”

“Not at all; it is worms in the heart!”

“Look rather at the eyes; it is *bile* I tell you!” says the last speaker, “vitiated bile!” And vitiated bile they would decide it to be, that being a sort of pet cause of complaint among the conclave, and recognised as the ordinary ground of all maladies.

But each has her own arcana; one cures tetanus, another abscess of the liver in a twinkling; an old purblind jetty sybil puffs away all maladies of the eyes at a breath, and so on; and, alas! one of these wretched pretenders always erects herself to the office of head nurse to the patient. From the moment this takes place, a secret treatment, running parallel with that of the physician, commences,—scarce need I add, secret to him in particular; every precaution indeed is taken to keep it so; a vigilant slave is stationed as watch at the street-door in correspondence with another stationed on the stairs, and thus his approach to the house is telegraphed to the sick chamber. But the physician requires

no depth of observation to detect these manoeuvres, or yet the precise moment of interdiction to his ordonnances; indeed, the inefficacy of his prescriptions would alone suffice; but the moment he enters the room proofs multiply; hushed in a moment is the clacking of tongues, and a general scowl of abhorrence from the assembled sisterhood greets his entrance; some vanish on the instant, others go and come, or squat down in silence, furtively interchanging glances and every sign of thorough contempt both for the doctor and his prescriptions, and the moment his back is turned a stunning commentary on his text commences. “What!” exclaims one, “no food yet? Diet, diet, indeed!” “Aye,” quoth another, “he’ll kill the poor soul with his diet,—two days already without food!” “But not three,” echoes another; and forthwith the unhappy patient is crammed with substantial aliment. To this succeeds some nostrum; but all are not equally renowned, the sybil Marian’s nostrum stands pre-eminent as a specific for every human malady. For the composition of this blessed elixir Marian requires, as indispensable, a vessel of glazed Provence ware, never yet used by any one, to be bought by the parents or friends of the patient, and brought to her by a young girl under certain influences. The herbs of which this potion is composed must be gathered by herself, as the touch of any other hand would instantly destroy their efficacy. In some solitary nook, and under her petticoat, the expert Marian then pounds the herbs, adds radishes reduced to powder, oil of palma Christi, and God knows what besides, and the elixir vitæ is ready for use.

I was one day called in as assistant to a fellow practitioner in a case of cerebral affection. We did our best, you may be sure, but it availed nothing; the child got evidently worse, and there arose a murmuring amongst the assembled females about Marian. *Marian only can save her*, was whispered in tones of scorn at every word we uttered. Annoyed at this, and at the confusion and bustle around the little sufferer by the presence of so many persons, I felt excessively indignant; but I was then a stranger, only just arrived in the country.

Having informed the father of the child that there was no hope, he expressed the wish of his wife that recourse should be had to the aid of Marian, avowing at the same time that he himself had no confidence whatever in her drug. Pitying his weakness, we made no objection, but took our leave, not, however, before I had fully expressed my contempt for empiricism and all its practitioners. I was afterwards informed that the drug was administered with all the due formalities, and they are not a few, and that in the midst of its agonising operation the child died.

Now, what say you to all this? A pretty position, truly, for a medical man, feeling all the dignity of his profession, to be placed in,

his efforts perpetually contravened, and for the most part rendered utterly abortive by the vile juggleries of some black, white, or brown Hecate. But there is still a grain of comfort, such as it is; though empiricism holds here universal and despotic sway, there is no antipathy to the doctor personally; no baptism, no marriage, no feast, no merry-making of any kind, without *his* presence. Come, then, my brethren, to the colonies, for at least ye who lack patience may here learn it, and ye who have it, will as surely lose it; it is here as in India, if the proverb be true.

THE
London Medical and Surgical Journal.
Saturday, April 25, 1835.

CONTEMPLATED CHANGE IN THE
 DURATION OF THE MEDICAL SES-
 SIONS.

WE have at length the pleasure of announcing to our readers, that one step, at least, towards the adoption of a more efficient system of education in our medical schools has taken place. The teachers of St. Bartholomew's Hospital have the honour of first proposing the improvements we are about to notice, and have addressed a circular letter to their colleagues in the metropolis, explaining their views on the subject, and calling for their co-operation. These views tend to show that the present plans acted upon at our medical schools are inefficient, owing chiefly to the short duration of their sessions, and the consequent crowding of oral and practical instruction, to such an extent, as to confuse and distract the pupil's attention. That, owing to the multiplicity of lectures following so closely on each other, the pupil's attendance in the wards of the hospital is only desultory and interrupted; so that clinical instruction is either neglected, or pursued at the expense of other studies. That, from these combined causes, the professional education of the student is imperfect, although the opportunities afforded in the metropolis to accomplish an effective and

thorough curriculum are numerous and first rate.

To remedy these evils, it is proposed to extend the medical session from seven to ten months, that is, from the 1st of October to the 1st of August, leaving the latter month and September for the vacation. This session to be divided into two equal parts, and the lectures to be distributed between them. It is presumed that, under these regulations, the spring and summer portion of the session would be best adapted to attendance on hospital practice, and that, therefore, lectures on practical subjects might be then given with the greatest advantage.

That this step in advance, so long called for, is highly important to the interests of the medical community and the public, must at once be granted, and we hail it as the harbinger of a more liberal policy being followed by the teachers of medicine generally; indeed we sincerely hope that it will be responded to in the same spirit which dictated so considerable an amendment of the hurried and inadequate system now followed. The extension of the session, and its division into two periods embracing different branches of study, we consider a judicious regulation, and doubt not but its beneficial influence, when carried into execution, will soon become perceptible.

We are aware, however, as the laws now stand, that these good intentions on the part of the medical teachers, even supposing them to be all united, cannot, without difficulty, if at all, be effected without the cordial concurrence of the College of Surgeons and the Hall of Apothecaries*, but as these have hitherto

* We have been informed that a manifesto is about to be issued from the Hall of Apothecaries, similar in its provisions to the Bartho-

displayed no backwardness in demanding of the pupil an increase of his information, and in levying pretty heavily on his purse, it is to be hoped they will show an equal degree of alacrity in calling for the appropriation of a little more of his *time* also to the pursuit of his studies at the medical schools. One great reason of the inefficiency of the present plan of medical education is, not that the number of collateral sciences required by it to be gone through are too few, but that sufficient time to study them deliberately is not afforded. This inconvenience the extension of the term would remedy; and, indeed, if another winter, to be devoted solely to hospital practice and clinical study, were added to the time already required, it would be an improvement, and could be objected to only on the score of expense; but this objection has always been started against every improvement hitherto instituted, and ought not to have much force. Besides, we presume that the exorbitant fees now levied as the price of teaching the different branches of medical study will, before long, either from the multiplication of schools in the kingdom, or the good sense of our teachers, be reduced; thus, in some measure, meeting the pecuniary difficulty. For the rest, we say, raise the standard of medical education to the highest practicable pitch, and the apprehensions expressed by *some*, that there *might* be certain corners in the country too poor to remunerate, and, therefore, to possess a medical practitioner, will vanish “*in tenues auras*,” and that difficulty, like many others opposed to the onward march of reform, by short-sighted alarmists, fade away, and, “like the base-

less fabric of a vision, leave not a wreck behind.”

But while some of our teachers of medicine are thus worthily extending the hand of friendship to our infant reform, it may be asked, what are the aristocracy of our profession about? What is going on at the Pall Mall palace of Physicians? Verily nothing; or what *nothing* might well supersede. Like Penelope's web, their plans of to-day vanish on the morrow. They do and undo in marvellous silence, and their absurd clinging to antique follies, their destructive ambition of keeping things as they are, is hurrying them fast downwards in the public opinion, bound hand and foot to the chariot wheels of prejudice and pride. Bending their neck to the Baal of indolence, their steps are either irresolutely forward, or retrograde, and they have the mortification of seeing (if sight be permitted to their classical chaos) their Corinthian column tottering for want of sufficient support, and hourly becoming more and more the laughing-stock of the surrounding gazers. A wretched plight, at any rate, for an Attic oligarchy, but doubly wretched when contrasted with the vigorous life and efforts of a Bœotian rival. The latter is fast superseding the former. The Apothecary is, in the public opinion, taking the place of the Physician.

If we take a review of the facilities for medical education, which, since the termination of the war, have been imperceptibly growing throughout the country, we shall find that, although prior to 1815, the metropolis alone could boast of medical schools, they afterwards spread rapidly, and are now existing in most of our populous towns. As the ability and acquirements of the professors in these schools have been unequivocally acknowledged at the head-quarters for examina-

lomew plan, except that the Hall divides the academic term into two unequal parts of seven and three months each, and proposes about a fortnight's holidays at Christmas and Easter.

tion in the metropolis, their utility must be great. They offer to the country student a point nearer his home, and, consequently less expensive, wherein to prosecute his professional career. This increase of medical schools arose from a certain curriculum of education having been rendered imperative by the passing of the Apothecaries' Act. Before that, each took his own way, as inclination dictated or funds permitted, and as there were no laws compelling such as intended to become general practitioners to accomplish *any* course of study *at all*, expediency was too often made the standard of efficiency. The Apothecaries' Act, whatever may be said of it in other respects, certainly achieved *this* portion of good, that it introduced order where before were anarchy and confusion. The impulse it created by substituting a systematic and compulsory routine of study, instead of the former undefined and optional schemes, has, without doubt, tended to raise our professional character in the estimation of the public. There is, nevertheless, still ample room for improvement; and we are of opinion that a declaration from the College of Surgeons and the Hall of Apothecaries, coinciding in the views taken by the Professors at St. Bartholomew's School, would not only give substantiality to a plan which merits immediate adoption, and which, it is rather surprising, has not been proposed before, but would reflect honour on the institutions issuing such a declaration.

We cannot quit this subject without congratulating our professional readers, that the work of reform has in this instance proceeded from *within*, the external pressure, if any exist, not being very obvious. We of course presume that, in so large a hospital as St. Bartholomew's, clinical lectures will be *daily* delivered,

as we recommended in a late number, by one or other of the principal surgeons of that establishment. Without these lectures to guide and correct such observations as the pupil may be enabled of himself to make, mere hospital walking will be of very little practical utility.

THE RUMOURED CHANGES IN THE MEDICAL PROFESSION.

THE change which has taken place in the ministry will, we have no doubt, accelerate the progress of a substantial and searching reform in our profession; as yet, this session, nothing has been done on the subject. The short career which the late ministers were destined to run having been at the same time a stormy one, placed reformers in such a position that no opportunity occurred for introducing a measure for medical reform, or even taking the preliminary steps necessary thereto. The voluminous evidence taken before the Committee on Medical Education, for the purpose of bringing up a report, must, prior to a bill being brought forward, be sifted and thoroughly considered.

Knowing that no steps have been hitherto taken in the affair, we were much amused at some paragraphs which have lately appeared in several of the daily papers, announcing that, by Mr. Warburton's Bill for the regulation of Apothecaries, the latter were not to be permitted to compound or vend medicines, but were to be considered as a kind of minor physicians, and to receive ten shillings for each visit; or they might, if they thought fit, take *less*—a great boon, certainly! Chemists, according to these paragraphs, were to be the sole dispensers of medicine, and were to undergo a *rigid* examination.

We should not probably have noticed

this fell invention of some wag, had not several letters from the country been addressed to us, decrying the system, and bewailing the disasters which would thence spring to a host of apothecaries and general practitioners; and, indeed, not a few in town took the alarm, for the daily press was addressed on the subject in tones of loud lamentation.

We have already shown that there was no ground for doubt or fear on the occasion, since nothing has been done for medical reform in the House of Commons this session; nor is it likely, when a bill is brought in, that a clause enacting the sudden change alluded to will be introduced; at all events, the injustice of making it retrospective would be avoided as a partial mode of legislation. The necessities of the people called into existence the general practitioner, long habit has rendered him familiar to them, and no law abolishing suddenly his compound office would be for a moment tolerated. It is one thing to purge our medical institutions of the abuses which exist in them, and to demand that all professors of the healing art shall possess an equal degree of education, and enjoy, if it so please the legislature, a similar title: so far the good wishes and support of public opinion and of all reformers in medical affairs would go hand in hand with the legislature. But commence a warfare against the habits of the almost innumerable body of our countrymen, who from one end of the kingdom to the other are accustomed to the attendance of the general practitioner, by enacting a law against him, and the dissent would be too universal for such a law to be effective. All that legislation can do in this affair is to afford facilities to such of the general practitioners as may wish to adopt a fee system exclusively, and allow

the change, if it ever takes place, to do so gradually.

RECENT DISMISSAL OF THE SURGEON
TO THE PARISH POOR OF ST. MARTIN'S-IN-THE-FIELDS.

A CORRESPONDENT has directed our attention to an affair which has lately occurred in the parish of St. Martin's-in-the-Fields. As it involves the interests of the medical attendant on the poor of that parish, who has for many years discharged his laborious duties with credit to himself and benefit to the objects of his care, we may be permitted to say a few words on the subject of his abrupt dismissal. It appears that, after the party-struggles in this parish to convert its hitherto close divan called a vestry into an open assembly were concluded, leaving the triumph to the reformers, a certain medical gentleman, who had enacted a conspicuous part on the side of the liberals, was forthwith appointed surgeon to the parish poor, thereby displacing Mr. Gozua, who had filled that office for the last ten years. What seems somewhat harsh and irregular in this proceeding is, that the party coming into power had not the decency to wait until the usual period for electing a surgeon for the year had arrived (this period we are informed is some time in June), but immediately proceeded to instal their partisan in the post of one who, although perfectly competent to the office he held, was not a meddler in parish politics, or a speaker on either side. After a service of more than ten years without blemish, we think a little more courtesy in discharging this gentleman would have been advisable as well as becoming; and we cannot help remarking, that some explanation on the part of those who have acted with so much haste and apparent injustice is required.

A WORD ON THE HOMŒOPATHIC
DOCTRINE.

WE have hitherto forborne all animadversion on the homœopathic doctrine, contenting ourselves with merely reporting facts well calculated to illustrate its utter absurdity. What, in truth, can be said about a system or doctrine, or whatsoever they are pleased to call it, in which not one sparkle of science or of common sense is to be found? Is it worth while to attempt serious refutation of such ineptitudes as these? "Homœopathy," says Hahnemann (vide Preface to his Doctrine), "clearly demonstrates to all who reason, that maladies do not depend on any acrimony of the humours—on any real morbid principle whatever; but arise wholly and solely from *dynamic disunion* of the vital power which virtually animates the frame of man." Again; "Homœopathy sheds not one drop of blood: neither purges, vomits, nor sweats: neither does it drive inwards external maladies by tonics: has nothing to do with the application of blisters, sinapisms, setons, or cauteries: nor does it burn the flesh to the bone with red hot iron."

What, then, does homœopathy do? asks good faith in its simplicity. *Do!*—The homœopathite cures his disciples homœopathically—*simile simili gaudet*—and, moreover, makes dupes or charlatans, fanatics or speculators. "I reproach myself," gravely says their high-priest (page 6, Preface), "with having formerly so far yielded to the doctrine of the allopathites, as to advise the application of pitch-plaster in psora of the back, which caused great itching, and to give a few slight electrical shocks in cases of paralysis."

By allopathites this dreamer means the regular physician, whom he anathematizes for pretending to cure maladies without having the slightest suspicion of *this most useful truth* (vide Preface), *that they all have a psoric origin*. So this expert homœopathite recommends, in gastric affections, the patient to smell an atom of sugar the size of a mustard seed, saturated with a little gum-water, which infallibly restores order to the whole system in general, and to the stomach in particular, within two hours!

Eheu! quam brevibus pereunt ingentia causis!

What does homœopathy do, indeed! Why, finally, it delivers itself at a birth of three tomes of *Materia Medica*, in which, most happily, we find that the millionth part of a grain of aconitum operates wonders in measles, miliary and inflammatory fevers, pleurisy, &c.; and that all danger is dissipated in about four hours, provided the patient abstain from every other medicinal drug! Moreover, that one grain of ambergris pounded with 100 grains of sugar for an hour, then one grain of the

powder thus bruised with 100 more grains of sugar, then one grain of this second pounding with 100 more grains of sugar, giving about a millionth part of a grain of amber, mixed in the above quantity, and a very small part of a grain is not only a sufficient dose, but, in the greater number of cases, *acts most wonderfully!* and, indeed, would be so strong (says this immortal discoverer), that it would require small doses of camphor or nux vomica to counteract the effect of it.

And thus, in the nineteenth century, writes a man calling himself a physician! Thus he disseminates his German fripperies all over Europe, to the bewilderment of the credulous and vain, the encouragement of knavery, and the utter exhaustion of our patience and forbearance; and wherefore should we be stunned by the reverberation of these absurdities? Better would it be, that we should have to smile again at the frenetics of Mesmer, the convulsionists of Saint Médard, the exorcised of Loudon, and the somnambulists of Busancy; they, at least, had some little leaven of spirit, sense, and good faith kneaded with their folly. But we pause; indignation must sink into contempt; for were we to treat the matter seriously, we should ourselves deserve a place in Bedlam.

Foreign Hospital Reports.

HOPITAL DE L'ÉCOLE.

CLINIC OF M. CLOQUET.

Excision of Noli me tangere of the Cheek.

A SMALL cancerous tumour (*noli me tangere*), rather inflamed, situated about half-an-inch below the free margin of the lower eyelid of the right eye, was held by a small pair of double pincers, and excised by one single cut of the scissors. The action of the scissors is less painful and more rapid than that of the bistoury. A linear and transversal cicatrix must remain: but M. Cloquet does not believe that he will suffer from ectropium, since the small quantity of skin is somewhat raised, as well from the disposition of the eyelids, which are wrinkled, and the skin very loose. The patient felt, he said, no more than from the pricking of a pin.

Fracture of the Leg, with Wounds, terminating in Gangrene—Circular Amputation of the Thigh.

At length an amputation at the lower part of the thigh has been performed on a young mason, twenty-two years of age, and of vigorous constitution, who had fallen from a second floor on the points of an iron railing. One of the points passed completely through the left leg: the bones were broken, and the knee wounded.

Immediate amputation, which M. Cloquet has often performed under such circumstances,

has never succeeded. In consecutive amputation, though little advantageous, he has been more successful: he, therefore, determined to delay it. The reduction was made by simple extension, and the part retained thus by means of a suitable apparatus, which I shall describe hereafter, and which consists in the superposition of the limb on an inclined plane; the wound remaining uncovered is dressed and continually irrigated with cold water, the effects of which are very advantageous. During the first days, thanks to this operation, the inflammation was moderate; but, quickly after, the wounds assuming a gangrenous aspect, amputation became indispensably necessary. The wound in the knee, the extent of the swelling, and the purulent matter, which extended to the thigh, rendered it also necessary that it should be made above the knee. In a case of this nature, where gangrene proceeds from external causes, and without infection, M. Cloquet thinks it is not right to wait until the gangrene becomes developed. The patient being very timid, was not easily brought to decision; however, he afterwards supported the operation very quietly, if not with courage. The amputation was circular. The incision and dissection being made, M. Cloquet, at the second cut, reached the bone. The operation was prompt and well executed: perhaps too much skin was left, especially on the upper part. The ligatures being placed, the parts were brought in apposition in the usual way.

Errors in the Construction of the Halls and of the Amphitheatre.

We have never very greatly admired the building of the clinics of the school; a parallelogram agreeable enough to the eye, but the stairs, the garden, and the galleries of which on the ground floor, occupy three-fourths of the whole space. On the first floor this building contains halls of small dimension, or rather corridors, in which, at this season, by no means of high temperature, we are already stifling with the closeness and heat, professors and students equally annoyed. And this morning we heard M. Cloquet complain of the deleterious influence of the confined air of these halls on the amputation wound of a young patient, who died a few days ago, though the appearances of his condition were favourable. An amputation of the thigh was performed this morning, again under circumstances little favourable to the consequences of gangrene when not extensive, which has supervened in the fractured leg, in the wound of a young mason; so that, positively, we can no longer remain silent on the inconveniences of the amphitheatre.

This hall, small, and capable at most of containing 150 persons, receives light only from a sky-light above; the light is sufficient, but there wants air; and though both the doors, the one fronting the entrance, and the other

carefully kept open, the professor and students were nearly suffocated with the heat, and complained bitterly: nor was it the first complaint of the kind. M. Cloquet has exclaimed and remonstrated again and again, as yet to little purpose, and declares that the Agent of Surveillance runs the risk of having every pane in the sky-light smashed, if he any longer delay to have a swing adjusted to it, so that it may be opened at pleasure to admit the air. To these great inconveniences we must add another:—The entrance to the Patient's Hall is at some distance from that of the amphitheatre; and the transport of the unfortunates who have to undergo operations takes consequently a great deal of time: this morning, for instance, we heard the disagreeable creaking of the castored chair in which the young man was being rolled to the hall of amputation, at least half-a-minute before we saw it. The length of way from door to door, and the horrid sound of these castors must, we should think, add to the sufferings of the unfortunate patients, especially if timid.

The architect of this building, like that of the Institute, took very good care to reserve to himself a commodious and agreeable lodgment; but we doubt whether the professors and the students, and more especially the patients, owe him any very particular thanks for his pains.

Perforation of the Bladder by the point of the Probe—Means of preventing that Accident.

M. Cloquet says, that he has observed, at least fifteen or sixteen times, the perforation of the bladder, the peritoneum, and death, in cases where probes of gum-elastic remained in that organ against its posterior coat, especially if the point is very sharp. This accident takes place especially if the patient has any of those pouches caused by the rupture of the mucous membrane of the bladder through the muscular membrane; and the point of the probe getting into one of these causes it to become still larger, and even frequently ruptures the coats, and then through the perforation the urine flows into the pelvis, and partly into the peritoneum: irritation and death are the consequence.

To avoid which, M. Cloquet advises a soft substance to be placed towards its vesical extremity, to raise the point of the probe immediately after its arrival behind the pubis; in this manner the pressure against the posterior coat of the bladder is not made by the point, but by the middle part of the curvature of the probe; and if afterwards care is taken to withdraw the mandrel half out, and at the same time to lower the handle of the instrument, so that the extremity of the gum-elastic probe yields and raises itself without difficulty to the upper part of the bladder, the mandrel may be then withdrawn, and no danger of perforation remains.

HÔPITAL DE LA CHARITÉ.

CLINIC OF M. VELPEAU.

Tumefaction of the Arm and Wrist Joint.

The following fact may serve as a refutation of Dr. Rognetta's letter, published in that journal 24th of March.

We have recently had an opportunity of making observations on a case, in the person of a plasterer, which is by no means common, but which has already been noticed. The man is between thirty-five and forty years of age, of very strong and sound constitution. From the nature of his employment he must of course be continually using the right hand, alternately in a state of pronation or supination. He has lately complained of pain in the articulation of the wrist, and in the under side of the fore-arm we observe this symptom, which at first view might be easily confounded with fracture of the inferior third of the radius, as, in fact, it is described by those who have already noted this affection.

Enlargement of the inferior side of the fore-arm, which suddenly subsided about its external part, where the tendons of the long abductor and of the short extensor of the thumb turn back upon the radius; the touch quickly rectifies the error, for if with one hand the wrist is seized, and with the other rotatory movements were made, from which an effect is felt which cannot be compared to the friction of two parts of a fractured bone, nor to the crackling produced by emphysema, but is similar to that which results from the twisting together of a bundle of leeks, the coats of which are smooth, flexible, and almost deprived of the vegetable sap; this would lead one to the belief that this affection arises rather from diminution than alteration of the exhalation of the liquid which lubricates the tendons of the muscles and the condyles which envelope them. In the subject in question it is in the upper part, and especially on the external side of the fore-arm; it does not appear to go beyond the carpus, but remounts almost to the bend of the arm; it is also felt at the wrist, that is to say, at the swelled, or, as we prefer to call it, the thickened part, where there is more heat than in its normal state. A compressive bandage, saturated with camphorated brandy, has been prescribed to this patient.

We give publicity to this fact, slight and incomplete as it is, because, in the first place, it is probable that few cases of this description have terminated so satisfactorily and favourably in this country, and that from the researches we have made on the subject since the publication of Dr. Rognetta's, we are enabled to demonstrate that he is deceived in his claim of priority of observation on the matter, since this malady was remarked by M. Velpeau in 1818 in the Hospital of Tours, in a young joiner (vide *Journal des Connaissances Médicales*, 7th). In 1825 also,

M. Velpeau, in his anatomical work, p. 406, on the muscles of the fore-arm, speaks thus explicitly of the malady in question:—

"A swelling, never very considerable, will manifest itself after an effort, or even without a known cause, through the length of the muscles indicated; this swelling is accompanied with heat and pain, commonly not very great, unless the patient endeavour to move his thumb; but what is more remarkable is, that if the swelled part is grasped by one hand, and with the other the patient is made to move his thumb, a crackling is very evidently both felt and heard, inasmuch that we have known a surgeon pronounce it fracture, and apply accordingly a suitable bandage." Again, this passage is found also in the second edition, 1833, of the same work, and under the article "Fore-Arm" (*Du Répertoire des Sciences Médicales*), for the same year, we find these words, page 435:—

"This thickness, furnished by the aponeurosis which forms the region of the fore-arm, or the organs which it encloses, is the seat of a very singular malady, which I have already observed fifteen or twenty times, although it is not mentioned in works on surgery, &c.; it is characterised by a very evident crackling, both felt and heard."

Fracture of the Neck of the Thigh. New Mode of Treatment.

In the hall of St. Catherine is a woman sixty years of age, strong and vigorous in constitution, and enjoying perfect health, who fell flat on her right haunch, and was quite unable to rise or to walk. She was brought in on the 21st March, and we found the following symptoms.

She could not move the limb at all; the point of the foot and knee turned; the leg slightly bent outwards, but no crepitation; the great trochanter moveable, but, impressing a rotatory motion on the limb, described but one-eighth of a circle; the limb shortened.

This shortening of the limb, M. Velpeau observed, could not arise from luxation of the ilium; for, in that case, the point of the foot would have turned inward: nor from luxation of the foramen ovale; for, though the point of the foot would then turn outward, the limb would be elongated. Neither could there be luxation of the os pubis, though the signs of this luxation are less characteristic, the same as that of fracture of the neck of the thigh, namely, absence of manifest tumour in the groin, without the femoral vessels. Finally, there could not be luxation of the sciatic notch, because, though there would in such case be a decided shortening of the limb, the point of the foot would turn inwards. How then were these contradictory signs of luxation and fracture to be reconciled? The annals of our ancient surgery give no assistance, nor does the English work, containing the observations of Mr. Amesbury; he, however, demonstrates that in old people the shortening may take place without

either luxation or fracture, as it arises from a peculiar malady, called therefore the senile affection of the neck of the thigh; but, like all other maladies, it must have its antecedent symptoms, and the old dame in question was in perfect health up to the moment of her accidental fall. In the recent observations of M. Schmidt, we, however, find a solution of the enigma.

From this author, then, it clearly appears, that in fracture of the capsule, which surrounds the coxo-femoral articulation, that is, *intra-capsular* fracture, there is less shortening of the limb than in *extra* capsular fracture; and that it presents symptoms which cannot be made to bear upon the four species of luxation already mentioned, nor upon the known fractures of the neck of the thigh.

From all the foregoing considerations, M. Velpeau is of opinion, that in the case in question there is fracture of the neck of the thigh, and as such he is treating it; but in a manner which may perhaps appear a little whimsical, in as far as it opposes established practice. "But," says M. Velpeau, "the success which I have had in several cases of the same kind, warrants the same treatment." It consists simply in making the patient walk as soon as possible; and, according to the Professor, so much the better, since it is by no means proved that *intra-capsular* fracture ever consolidates in old subjects. Ey this treatment also are avoided the general influences which tend to weaken the patient; local accidents, such as ulcerations on the os sacrum, above all ankylosis, with all the other accidents consecutive to an apparatus keeping up certain extension. The result of this experiment shall be given as soon as known.

British Hospital Report.

WESTMINSTER HOSPITAL.

External Application of Iodine.

CASE I.—*Varicose Veins.*—Maria White, ætat. 32, was admitted July 10, 1833, into Anne's Ward, under Mr. Guthrie. Is a woman of the middle size, and rather stout. Has not been married, nor had any children. Is a cook, and has, consequently, much standing. Her sister is similarly affected, and has the same mode of life. The disease affects the vena saphena major of the left leg, which is exceedingly varicose, forming numerous irregular soft tumours in its course, more especially below the knee. She has been thus affected about two years: her health is good. Mr. Guthrie ordered the tincture of iodine to be applied externally over the vein so as to blister it, the application to be followed by a poultice. This was practised every day, and she considered that the varicose knotty appearance of the vein was diminishing, when

an erythema, extending from the fore-finger of the right hand up the inside of the arm to the arm-pit, supervened, and caused the suspension of all other measures. It was combated by rest, low diet, purging, and cold lotions, by which it was finally subdued, not, however, without partial suppuration taking place in the finger, which was poulticed, opened, and healed under the ordinary treatment.

When the finger was well it was deemed advisable to resume the application of the iodine to the leg, to which, however, the woman demurred, as she had got it into her head that the inflammation of the arm depended on the use of the tincture to the leg, and she was unwilling to go through it again, even with the hope of getting rid of her troublesome companion. She accordingly left the hospital relieved only.

CASE II.—*Bronchocele.*—Mary Patterson, ætat 17, residing in Tufton-street, was admitted an out-patient under Mr. White, June 22, 1833. The disease had existed about three years. When it commenced the menses had not appeared, and did not until about a year after. The tumour remained of a small size until about six months ago, when it began to increase rapidly. It did not impede speaking, breathing, or swallowing. She is anxious to get rid of it, merely on account of the deformity it produces. She is a native of Westminster, where she has always resided. Her brother, a young man 25 years of age, has also a bronchocele, affecting the left side of the fauces only. With her, both sides of the gland are enlarged, the left being the largest. The isthmus, also, is increased in size, but proportionally; the tumour is soft and slightly moveable; her health she reports to be very good; menses perfectly regular, of proper colour and quantity; bowels regular.

She was ordered the tinct. iodine internally, gradually increasing the dose, and an ointment of the hydriodate of potass externally to the tumour. While this treatment was pursued the bronchocele gradually increased in size, although the ointment caused external inflammation and the formation of pustules. On the 26th of July, therefore, the treatment was so far modified, that the tincture of iodine was applied externally, while the hydriodate was totally omitted. Early in August the tumour was measured, and the application continued. Measured again on the 23rd, and found to be half an inch smaller in circumference. This plan was persevered in to the middle of September, with but little advantage, when it was changed for the internal administration of soda. This was continued for some time, increasing the dose until she took two drachms three times a-day. By November the tumour appeared to be increasing in size, although evidently softer. She was then ordered to return to the internal and external exhibition

of iodine, but, getting tired of medicine, she discontinued her attendance. Some mention was made of placing a ligature on the superior thyroid arteries, but the intention was never carried into execution.

Malignant Tumour of the Neck.

CASE I.—William Dowsett, æt. 73, residing at Epping, a smith by trade, was admitted into Burdett Ward, under Mr. Guthrie, 24th Feb. 1835.

He is a man about the middle height, emaciated and debilitated, is a widower, and has had five children. The tumour for which he was admitted occupies the left side of the neck, below the angle of the jaw, backwards behind the mastoid process, and considerably below it, and nearly as far forwards as the pomum Adami. It also extends upwards over the ramus of the jaw, and forming a prominence in front of the ear, and can be felt underneath, passing deeply inwards. The sterno-cleido-mastoides of that side is thrown rather out of its place by that part of the diseased growth which is most prominent; the whole of the tumour is nodulated, but firm and fixed, so as in no way to admit of rotation; the integuments are much discoloured, and marked with dark purple veins; and adherent throughout the disease; none of the nodules or elevations presents any indications of softening. He complains of darting pain in the neck, principally experienced in front of the ramus of the jaw. The carotid of that side beats rather more forcibly than the other, and indeed than the pulse in any part; the pulsations of the left temporal and auricular arteries are very feeble indeed; the pulse is small and thready, beating about eighty in the minute. The poor fellow says he does not suffer very acutely from his malady, but his whole appearance betokens pain and anxiety. The tumour does not press on the larynx so as to cause any difficulty of breathing, but his speech is rendered thick and very indistinct; the powers of swallowing are also much impeded. He cannot open his mouth sufficiently to admit of an examination of the fauces, in order to ascertain whether the disease is pressing inwards.

This disease commenced, according to his account, only seven months since, and when first discovered by him it was not larger than the apex of the finger, and was perfectly moveable and without pain. He paid no particular attention to it, not considering it a thing of moment; it gradually increased in size for some time, but has of late enlarged much more rapidly. He says that, previous to this complaint, he has generally enjoyed good health. He sleeps well even now, can lie on that side without any increase of pain; his appetite is good; and, with the exception of the difficulty of swallowing and the pain in the tumour, his health is good at present; he

has not any cough, or any symptom indicative of pectoral disease; he has not suffered from headach; he has not been accustomed to drink spirits, and has seldom exceeded his daily half-pint of beer.

It became a question in this case whether it were a fit and proper one for an operation. The age of the patient, the extent, size, and deep attachments of the tumour, with its rapid growth, the darting pains, and discoloured integuments, all fearful characteristics of malignancy, militated most strongly against the feasibility of an attempt at extirpation; on the other hand, the general good health of the patient, and his comparative freedom from disease (with the exception of the complaint for which he was admitted), with the absolute certainty of a fatal termination should the disease be left to itself, were circumstances to be maturely weighed against those already mentioned of an unfavourable nature. These latter were considered so cogent that it was said that if the man had been twenty years younger, and were willing to submit to an operation, it would have been done. As it was, nothing was to be done, and indeed the patient himself had predetermined not to allow any thing of that nature to be performed on him.

He shortly after left the hospital to return home.

A case of a similar character occurred a year or two since in the old hospital, which terminated fatally, a few notes of which were taken by us at the time, which we shall now submit to our readers.

CASE II.—*Malignant Tumour of the Neck—Death.*—Jan Daves, ætat. 70, a Hanoverian by birth, but long resident in England, was admitted into Mark's Ward, Sept. 17th, 1833, under Sir A. Carlisle. He is a man of the middle size, dark complexioned, the countenance indicative of considerable anxiety and suffering; he is also much emaciated. According to his report, he has been thirty years in London, working as a sugar-baker, and has always enjoyed excellent health until he became affected with the complaint for which he is admitted.

On examination, a tumour was found to occupy the left lateral region of the neck, extending from the mastoid process, pushing the ear forwards, and forming a considerable projection on the face: it also extends downwards, occupying about three-fourths of the lateral region in every direction. The course of the carotid artery has been materially altered by the situation of the disease, which has pushed it considerably nearer the trachea. The whole of the parotid gland, as far as can be judged, appears to be involved in this malignant degeneration. The shape of the tumour is very irregular, and very difficult to describe:—it consists of a firm, hardened base, strongly adherent to all the vicinal parts, and extending

deeply under the lower jaw, on which are placed, at uncertain distances, several nodules, with intermediate depressions, there being between them large dark-blue, or even purple, veins, which anastomose and ramify very freely not only over the whole surface of the diseased structure, but also to a considerable distance in the surrounding integuments, more especially downwards on the thorax. All the parts of the tumour are firm and unyielding, with the exception of the apices of all but one of the nodules, where the skin is evidently thinned, and a sense of fluctuation is communicated to the finger. The cuticle of one of these projectious is abraded, and there is a slight serous discharge from the surface; the largest of these is situated near the angle of the jaw. The integuments are of a very dark colour. The tumour is not painful to the touch, nor even under free manipulation; but he describes his sufferings as intense, and frequently preventing his obtaining any rest at night, the intervals of partial freedom from pain being very short; it is principally felt in the tumour, darting thence into the head, and is of the true lancinating character.

The extreme anxiety of countenance and great emaciation were, at the first view, palpable indications of malignant disease, and the appearances just detailed in no respect altered the opinion which had been formed. The general health was somewhat affected; there was occasional cough, but not severe; there was also some difficulty of breathing, but none of swallowing; the pulse was small, hard, and jerking; he complained of a constant sensation of swimming in the head and vertigo, which he seemed to regard as his worst complaint: this was in all probability produced by pressure exerted by the tumour on the jugular vein, as might be attributed the paralysis which existed of certain of the facial muscles, to compression of the portio dura, either before or after it forms the pes anserinus in front of the ear. Hearing is not in any way defective.

The disease commenced six months since; was a small moveable tumour, to which he did not pay much attention as it did not give him much inconvenience. In this quiescent state it continued for some time, but has of late increased rapidly in size, producing those symptoms which have been already detailed. A month or two previous to his admission into the hospital he attended as out-patient under Mr. Lynn, sen., who declined attempting its extirpation, or any operative interference, and this opinion he afterwards expressed very strongly when the man became an in-patient. Both Mr. Lynn and Mr. White declined giving the disease a specific name. Sir A. Carlisle, whose patient the man was, said that it approached the nature of carcinoma, and somewhat resembled chronic carbuncle. Sir A. soon afterwards introduced a lancet into the softened nodules, and gave exit to a quantity

of sanguinolent pus, mixed with blood and clots. The openings were tented, and a linseed-meal poultice with a tablespoonful of bay-salt ordered to be applied.

This application caused a very severe attack of inflammation over the whole extent of the tumour; and the poor fellow declared that he has been ever since in constant pain: the paralysis of the facial muscles became more marked, and the difficulty of breathing increased very much, to which was soon added a degree of difficulty in swallowing. The poultice was consequently omitted, but the symptoms improved only for a short time, soon increasing in severity: the openings which had been made ulcerated deeply, and there was a constant discharge of thin ichor. The sensation of vertigo under which he laboured became more and more distressing, and, although alleviated for a time by the application of leeches to the head, was at last so severe as to cause not unfrequent fits of utter insensibility. Meanwhile, the other general symptoms were increasing in intensity; the cough became more severe; expectoration was considerable; the dyspnoea was much more constant and severe, and the difficulty in swallowing greater. Ulceration continued to make rapid progress over the whole extent of the diseased structure, which became completely excavated, with sinuses running in every direction. On the 8th of October, a new symptom was added, namely, venous hæmorrhage to a considerable amount from the lower part of the tumour: it was arrested by pressure, but recurred on the 15th, and reduced him very materially. By this time he could not stand upright without a fit of insensibility supervening, from the great pressure on the venous circulation. He laid afterwards in a state of apparent coma for two or three days, but was roused again for a short time by means of ammonia and other stimulants.

He was released from a life of suffering on the evening of the 21st. His friends would allow no examination of the body.

PAPER TO RESIST HUMIDITY.

THIS process consists in plunging unsized paper once or twice into a clear solution of mastic in oil of turpentine, and drying it by a gentle heat. The paper, without becoming transparent, has all the properties of writing paper, and may be used for the same purposes. It is especially recommended for passports, workmen's books, legal papers, &c. When preserved for years it is free from injury, either by humidity, mice, or insects. It is further added, that a solution of caoutchouc will produce even a better effect.

416 Apothecaries' Hall—Bills of Mortality—Appointments, &c.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, April 16th, 1835:—Dennis Embleton, Newcastle-upon-Tyne; Lewis Thompson, Newcastle-upon-Tyne; John Bryer Goddard, Christchurch, Hants; William Fawcett, Horncastle; John Shearing Willis, —; Richard Thomas Hunt, Margate; John Steel, Otley, Yorkshire; Charles Hitchcock, Chitterne All Saints.

MISCELLANEOUS.

Annual Report of the Large London Hospitals.

St. Bartholomew's Hospital.—Patients admitted, cured, and discharged during the last year,—5,267 in-patients, 7,852 out-patients, and 13,599 casualty patients, most of whom were poor, sick, and lame persons, and being destitute of all relief, many of them having been supplied with money, clothes, and other necessaries, to enable them to return to their several habitations.

In the whole	28,716
Buried from thence	346
Remaining under cure, in-patients	546
Out-patients	2,163

St. Thomas's Hospital.—There have been cured and discharged from St. Thomas's Hospital, in Southwark, during the last year, of sick, wounded, maimed, and diseased persons, 2,904 in-patients, and 26,632 medical and surgical out-patients, including casualties, many of whom have been relieved with money and necessaries at their departure, to accommodate and support them in their journeys to their several habitations.

In the whole	29,530
Buried from thence, after much charge in their sickness	237
Remaining under care, in-patients	402
Out-patients	1,825

So that there have been during the year, of poor miserable objects, under the care of the said hospital, and destitute of other proper care, 32,000.

APPOINTMENTS.

Naval.—Mr. Scott, assistant-surgeon to the Spartiate, Mr. H. Burrell, surgeon, and Mr. R. D. Fritchard, assistant-surgeon to the Sapphire. Mr. Samuel Mackey, surgeon, and Mr. D. A. Law, assistant-surgeon to the Tweed. Mr. B. Hinds, supernumerary assistant-surgeon of the Victory, to be hospital mate at Plymouth. Mr. H. Baker, supernumerary assistant-surgeon of the Victory, to be hospital mate at Haslar. Mr. Wm. Price (*u*), surgeon to the Excellent, vice Forman. Assist.-Surgeon George Mattley to be surgeon. Assist.-Surgeon M. Corry to the Thunder. Assistant-Surgeon J. Mansel, M.D., and Mr. W. Haley, surgeon to the Barham. Mr. W. Price, surgeon to the Excellent. Mr. Henry Price, surgeon to the Tweed. Mr. George Mottley, assistant-surgeon of the Plover, and Mr. A. K. Ballard, assistant-surgeon of the Blazer, to be surgeons. Mr. R. B. Hinds to be an assistant-surgeon, and do duty at Plymouth Hospital.

Military.—Hospital Staff—Assi-tant-Surg. Wm. Henry Fryer, from the half-pay, to be assistant-surgeon to the Forces, vice Robert Dyce, who exchanges.

General.—Dr. P. Nugent Kingston, of Mount-street, Grosvenor-square, physician to the St. George and St. James's Dispensary. Mr. Newport, house-surg. to the Infirmary at Chichester, out of five candidates. Dr. Chisholm, physician to the Kent and Canterbury Hospital.

Resignations.—Dr. Russell, assistant-surgeon 76th Foot. Dr. Loecek, physician-accoucheur to

the General Lying-In Hospital, York-road, Lambeth. Dr. Staunton, physician to the Warneford General Bathing Ins'titution and Leamington Hospital.

DEATHS.

Mr. Thomas Richardson, late of Plymouth, surgeon. Dr. Lorenzo J. Meagher, of Cloneen, county Tipperary. Mr. Welch, late of Birmingham, surgeon. At Kirkaldy, Mr. David Scott, surgeon of Kirkton Largs, Scotland. Mr. George Peacocke, surgeon, of Longford. Mr. Henry Cary Harrison, of Garvagh, County Londonderry, surgeon. Mr. George Hardy, apothecary to the Norfolk and Norwich Hospital.

WEEKLY BILLS OF MORTALITY.

London, April 14, and 21, 1835.

Abscess	2	Inflammation	33
Age and Debility	83	Inflammation of the Bowels & Stomach	5
Apoplexy	14	Inflammation of the Brain	7
Asthma	25	Inflammation of the Lungs and Pleura	12
Cancer	3	Insanity	4
Childbirth	6	Jaundice	1
Consumption	113	Liver, Diseased	4
Convulsions	53	Locked Jaw	7
Croup	1	Measles	11
Dentition, or Teeth- ing	10	Mortification	5
Dropsy	31	Paralysis	11
Dropsy on the Brain	17	Small Pox	16
Dropsy on the Chest	2	Sore Throat & Quinsey	1
Epilepsy	1	Spasms	7
Erysipelas	1	Stone and Gravel	1
Fever	12	Tumour	1
Fever, Scarlet	8	Veneral	1
Fever, Typhus	4	Unknown Causes	15
Gout	2		
Hæmorrhage	1		
Heart, Diseased	7		
Hernia	1		
Hooping-Cough	31	Stillborn	32

Buried, Males 320 Females 283 Total 603

CORRESPONDENTS.

Cynicus.—We have laughed most heartily at his palpable hits or rather home-thrusts at a certain green coated, would-be *arbitrèr elegantiarum* but we cannot insert the letter of *Cynicus*, although its richness and breadth of colouring are admirable. We do not wish to stretch "harmless vanity on the wheel of broad ridicule." The green-coated gnat may buzz his epithets of "*bad taste*" and "*worst possible taste*" in ears polite as long as he pleases, we have no cudgels puny enough to lay on so *delicate* a carcass. The poor insect seems to forget that the homely garb of truth cannot always be exchanged for a dandy cloak of elegant cut. We wish him joy of his brat "*TASTE*," but in the same breath recommend him to have it christened as soon as possible by the more appropriate name of "*twaddle*."

Originalis.—We cannot explain why that unquiet spirit, the Milesian Hippocrates, designates himself an "*Original*," unless it be from the mode in which he conducts his pamphlet; *that* is certainly most specially original.

Erratum in last Number.—Page 380, line 20, for "sic" read "sl."

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College,

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE IX.

Case of Peritonitis and Enteritis terminating in fatal Convulsions—Enormous Accumulation of Lumbrici in the Bowels producing Death by Convulsions—Causes of Catarrhal Affections of the Bronchial Tubes—On the Râles produced by Bronchitis—Remarkable proportion between the frequency of the Pulse and the Respiration—Use of Emetics and Chalybeates in Chronic Bronchitis—Symptoms which contra-indicate Chalybeates—Trismus from Inflammation of the Temporal Muscles—Pain in the Nerves of the Face simulating Tic Douloureux, and caused by a Carious Tooth—Case of Jaundice, with Remarks—Connexion between Arthritis, Jaundice, and Urticaria—Analogous Series of Affections often caused by eating Fish.

GENTLEMEN,—Let me direct your attention for a few moments to a case which presents some interest, as connected with the obscurity of its nature:—I allude to that of the young woman, Moran, who died this morning. She came in on Monday week last with symptoms of ordinary continued fever, for which the only remedies employed were effervescing draughts, diluents, and a proper attention with regard to diet. She had some headach, which went away a few days after her admission; and, as she made no other complaint, her case was looked upon as one of simple fever. Some time afterwards, it was observed that her abdomen was tympanitic, and that she had diarrhœa; but she persisted in denying that she had any abdominal pain or tenderness. In addition to this, symptoms of bronchial inflammation set in, but without any remarkable distress of respiration or acceleration of pulse. She made no complaint whatever, and seemed extremely unwilling to communicate

any information respecting her condition. Under these circumstances, all that could be done was to treat the symptoms as they became manifest, and, accordingly, after having leeches the belly, I ordered a large blister to be applied so as to cover the epigastrium and lower part of the chest anteriorly. The only thing remarkable in her case, and to which I should have called your attention more particularly, was the repeated occurrence of rigors. It appeared, from the account given by the nurse, that she had frequent attacks of shivering on last Friday and the two preceding days; and I have already told you, that, where this occurs, you should always suspect the existence of some local inflammation.

Such were the principal phenomena observed in this case. On Saturday she stated that she felt better after the application of leeches, and had no pain or tenderness whatever in the belly, but still it was observed that the tympanitis was undiminished, and that she was not by any means improving. This morning she called to the nurse to assist her in getting to the night-chair, when, after a few minutes, she was suddenly seized with a violent convulsive fit, and expired.

I may observe, that there was nothing in this case which would lead one to suspect the existence of cerebral inflammation. The fever was of the ordinary kind; there was no remarkable acceleration of pulse (the number of beats in the minute being only 84 when we examined her on Saturday); she had some headach, but this did not continue; and there was no flushing of the face, redness or suffusion of the eyes, heat of scalp, or throbbing of the temporal arteries. There was nothing to inform us that disease was going on in the brain, and yet the patient dies violently convulsed! Under these circumstances how are we to explain the manner of her death? At present I believe it would be better not to enter on any inquiry respecting this point. I shall endeavour to procure an examination of the body, and, until then, shall make no further observation.

On opening the body the next day no trace of disease could be found in the brain. The

thoracic viscera were also healthy, with the exception of some vascularity and congestion of the bronchial mucous membrane. In the abdomen there were ample marks of extensive inflammation. The cavity of the peritoneum contained a quantity of serous fluid; the intestines were glued together by lymph at almost every point of contact; and the serous membrane was highly vascular. The mucous membrane of the intestines was extensively inflamed, and there were numerous small ulcers in the situation of the glands of Peyer. The uterus, with its appendages, was in a state of intense inflammation, and presented marks of recent delivery. It appeared afterwards that she had been delivered of a male infant, the fruit of an illicit intercourse, a few days before her admission into the hospital. Under the influence of shame, and a desire to conceal her condition, she had, throughout her illness, persisted in strongly denying the existence of any abdominal symptoms whatever.

Here this question,—whether the disease might have been cured had its true nature been discovered on her admission,—naturally suggests itself. I must candidly confess that I think it might; and I regret extremely that the peculiar circumstances of the case rendered her anxious to conceal the existence of the symptoms of abdominal inflammation, for had it been otherwise, a more active antiphlogistic and mercurial treatment might, perhaps, have been successfully applied.

This case, gentlemen, affords another example of the truth of what I endeavoured to establish in a former lecture, concerning the effects which irritations of the periphery are capable of producing on the central portions of the nervous system; for here death was induced by convulsions, the mediate cause of which was situated not in the brain but in the abdomen. A very remarkable and striking case of a somewhat similar nature has been lately published by Dr. Ebermaier, in *Rust's Magazine* (Vol. 42, Part I., p. 52, et seq.), in which the abdominal irritation, caused by an enormous collection of lumbrici in the small intestines occasioned, in a child which had previously enjoyed good health, a sudden attack of pain in the belly, and vomiting terminating speedily in fatal convulsions. The intestines were not inflamed, but were completely obstructed in many parts of the ileum by successive round masses formed by agglomerations of lumbrici, rolled up together, and enveloped in an adhesive paste formed of half-digested bread, cemented by a tenacious mucus. The worms were too numerous to count, amounting to many hundreds!

A man named Murray, of middle age and rather strong constitution, has been recently admitted into the small chronic ward, with bronchitis of long standing, and frequent exacerbations. It is a case in which I am afraid a permanent cure is out of the question, and so far it is unsatisfactory; still it is necessary to be acquainted with such cases, for it is a

matter of some importance to be able to inform a patient whether his disease is curable or not, and how far it admits of being relieved by treatment.

Bronchitis is an affection which generally arises from impressions made by cold either on the skin or on the mucous membrane of the lung. I think it extremely probable that, when a person gets a catarrhal affection from exposure to cold, it is not always in consequence of an impression made on some part of the cutaneous surface. Indeed, it appears reasonable to believe that an attack of bronchial inflammation may be equally the result of an impression made directly on the mucous lining of the lung; and that a person exposed to sudden change of temperature, as in passing from a heated room into the cold air, may get inflammation of the mucous membrane of the bronchial tubes, for the same reasons that, under similar circumstances, inflammation may be generated in the mucous membrane of the eye, giving rise to conjunctivitis. We know well that one of the most common causes of inflammation of the conjunctiva is the sudden exposure of the eye to cold, sharp air, after it has been for some time submitted to the relaxing influences of strong heat and light; and there is no reason why the same rapid change of temperature, under similar predisposing causes, should not originate disease in the mucous membrane of the bronchial tubes. It is true, indeed, that nature has taken especial pains to maintain an equable temperature in the air admitted into the chest at each respiration; the passage of this air through the mouth, nose, and pharynx, where it is warmed by the contact of an extensive mucous surface, and the small proportion which it bears to the residual air remaining in the lungs after an ordinary expiration, are circumstances that must powerfully counteract the low temperature of air inspired in very cold weather. Still a considerable difference of temperature must exist between the inspired and expired air, and consequently the air passages are exposed *more than any other tissue of the body* to successive and rapid alternations, which never cease from infancy to old age. Nature has of course wisely accommodated the vitality of the bronchial mucous membrane to the circumstances in which it is placed, and the force of a never-ceasing habit still further enables it to sustain rapid vicissitudes of temperature with impunity. In this it is probably equalled by the surface of the eyeball, which alternately covered, warmed, and moistened by the eyelids during the act of winking, and exposed to the cold of the air, increased by a rapid evaporation from its own surface while the eye is open, must, indeed, undergo rapid variations of temperature, and yet it is never frost-bitten!

When inflammation has fastened on the mucous membrane of the air passages, it makes a vast difference as to the part on which it fixes. The air passages commence with the larynx, and terminate with the ultimate rami-

fications of the bronchial tubes. If the disease settles at the entrance of the air passages and forms laryngitis, the case becomes a very serious one, laryngitis being in the infant, and sometimes also in the adult, attended with danger and even fatal symptoms. If the trachea should happen to be the part on which the disease falls, the inconvenience and suffering are also considerable, but the danger is by no means so urgent as in the former case. The same thing may be said of the larger bronchial tubes; inflammation here is rarely attended with such violent symptoms as those which characterise laryngitis, and it is much more amenable to treatment. But when inflammation attacks the minute bronchial tubes to any considerable extent, and particularly if it happens to be general, that is, if it affects the bronchial tubes in every part of the lungs, we have just grounds for alarm; the disease is one of an intense character, and unless quickly relieved runs on to a fatal termination with great rapidity.

You perceive, then, that if a patient catches cold, and gets an attack on the chest, it is of great importance to be able to ascertain what the situation and extent of the disease are, and whether the minute bronchial tubes are engaged or not. Now, how do you know this? Simply thus:—You first make a cursory examination of the whole chest, by applying the stethoscope over the superior, middle, and inferior portion of each lung, both before and behind; and if you everywhere hear something, you conclude that the bronchitis is general, and not confined to any particular part. You next proceed to examine with greater attention these wheezing sounds; you apply the stethoscope, and if you find in each separate spot many sources of diseased sound—if you hear a wheezing from a great many points close together—you may be sure that the morbid sound proceeds from inflammation of the minute tubes; for the larger ones cannot exist in the small spots over which you apply the stethoscope in such numbers as to give rise to so remarkable a plurality of sounds. Of this you may be certain, that when you find a great many sounds are audible over a small space, the minute bronchial ramifications are engaged.

—It is the custom with those who lecture on auscultation, to enumerate many sounds as connected with alterations in the condition of the bronchial tubes. We hear of the mucous, the sonorous, and the sibilant rhonchus, their varieties and intermixtures. Now I know by experience that these names are very apt to confuse and perplex the young stethoscopist. There is no necessity for studying with great attention the definitions of these words, or the descriptions of the various sounds they are meant to represent: I am always anxious to avoid loading the memory of the student with names. With regard to the râles in bronchitis, all he need bear in mind is, that the nature of the sound produced by air passing through the

bronchial tubes will be modified accordingly as these tubes are large or small, are dry or moist, or as the moisture they contain is thin or not. The two things of greatest importance in examining a case of bronchitis is to ascertain whether the minute bronchial ramifications are engaged, and if the tubes contain any moisture, whether it is thin or viscid.

I seldom, therefore, confuse the student by telling him whether the râle is sibilant or sonorous, when asked about the nature of the sounds heard in a case of bronchial inflammation. All I say in reply is this; that the sounds are produced by the large or small bronchial tubes, and that they are either moist or dry. When the large bronchi alone are inflamed, the sounds issuing from the lung subjacent to the stethoscope are comparatively few in number, seldom exceeding two or three; they are likewise, when dry, of a grave tone, resembling the prolonged note of a violoncello, or the cooing of a dove, or, when moist, the bubbles are large, scattered, uneven. When the minute tubes are engaged we hear, on the contrary, not a few, but many sounds, evidently proceeding from a small portion of lung; three, four, or even six or seven sounds may be perceived together, or circumscribed within very narrow limits. These sounds undergo rapid changes of tone during the same respiration, while every moment some of them appear to cease, to be replaced by new ones. The wheezing they produce is, when dry, sharp: but observe, gentlemen, it is very unusual to find every one of them dry; when dry sounds occur, they are generally accompanied by others, equally minute, but evidently moist. The moment I find, on applying the stethoscope, that a great many sounds are heard over a small spot, and that these sounds are dry and sharp, or are accompanied by certain modifications denoting the passage of air through fluid, I call the disease inflammation of the minute bronchial tubes, with increased secretion obstructing the free entrance of air. An attention to these considerations is of great importance in ascertaining the nature of acute or chronic bronchitis; for the danger is not only proportioned to the extent of the disease, but also the circumstance of the minute tubes being engaged, and the quantity of fluid they contain. The sound shews, that not only the minute tubes are diseased, but also that there is a considerable quantity of viscid fluid in them, preventing the entrance of air into the air-cells, and tending to produce asphyxia.

In the case we are at present considering, we found, on examining the chest, that the minute bronchial tubes were extensively engaged, and they were obstructed by a copious secretion of mucus producing considerable dyspnoea. We found, however, that this condition had lasted for many months, and that the disease was essentially chronic. He had no fever; his skin was cool; his tongue moist; appetite and digestion good; and his pulse, which had been only 60 on his admission,

sank to 46 after he had been in bed for some days. Such extreme slowness of pulse as this is a very remarkable circumstance, particularly in cases of pulmonary disease: it is seldom met with except in cases of cerebral affections. Here was a man breathing twenty-six times in a minute, and with a pulse at forty-six, whereas, if the pulse was proportioned to the respiration, it would have been much quicker. The relation of the number of respirations to the beats of the artery at the wrist should be as one to four; thus, when we breathe fifteen times in a minute, the pulse should be at sixty. But here we find a man breathing twenty-six times in a minute, and yet his pulse is only 46. We had another instance like this, in a patient in the Chronic Ward, whose pulse was 60, while his respirations were thirty-six in a minute. It seldom happens, when pulmonary disease is in the acute form, and respiration considerably accelerated, that there is not a corresponding increase in the frequency of the pulse; but in chronic cases of this description the system becomes gradually accustomed to the derangement; the continued acceleration of breathing ceases to affect the action of the heart; the lung, which is obstructed by disease in the performance of its functions, contrives, by working more frequently, to aerate the requisite quantity of blood, and the heart adapting itself to the change of circumstances, the pulse returns gradually to the natural standard. I have seen many cases of phthisis, in which there was accelerated breathing, with slow pulse; but these were always cases of a chronic kind. I have never observed the same phenomena co-existing when the disease was acute. It is a state of things which is compatible only with chronicity of disease, in which the system becomes gradually accustomed to the change, and a kind of artificial equilibrium is finally established.

In this case we find that a man of tolerably good constitution, after exposure to cold, gets an attack of bronchitis, which becomes chronic, and extends almost over the whole lung. He has a cough always existing; sometimes better, sometimes worse, occasionally aggravated. This cough is accompanied by a copious secretion of mucus; and this state of things continues for more than twelve months. Now, when bronchitis has lasted so long on persons of his class in life, it is very difficult to be cured; his poverty, his want of proper clothing, his liability to the ordinary exciting causes of bronchitis from the nature of his employment, and the habitual disregard of self so constantly observed in persons of this description, are all circumstances which forbid us to entertain any hopes of giving permanent relief.

There are two points to be attended to in the treatment of this and every other case of chronic bronchitis; first, whether there be any recent attack, and consequently any fever and exacerbation of the local symptoms present; and, in the next place, whether the secretion

from the bronchial mucous membrane be copious or scanty. Now, at the period of this man's admission, there was some slight excitement of the pulse; but there was no fever or increase of bronchial inflammation present, and the heart's action was apparently not influenced by the state of the lung. In addition to this, there was no urgent dyspnoea, and the secretion from the lungs was extremely abundant. We therefore commenced by administering an emetic, which was repeated for two or three days, and then prescribed the following mixture, *mist. ferri composita*, ℞ij; *tinct. scillæ*, *tinct. hyoscyami*, aa ℥j, to be taken three times a-day in an ounce of almond emulsion. In chronic bronchitis, where no fever, no remarkable dyspnoea, or acceleration of the pulse is present, and where the bronchial secretion is very copious, you will be able to produce very good effects by giving an emetic every night for two or three nights, before you begin with remedies calculated to arrest the supersecretion from the lung. They are productive of a double advantage in such cases; a large quantity of mucus is discharged from the stomach and lungs, expectoration is rendered more easy, the tongue cleans, and the appetite is improved. It was on this account we gave them in the present case, and, as you may have perceived, with much benefit. In no disease are we more apt to have a foul, loaded, and furred tongue than in bronchitis. This state of the tongue being usually accompanied by loss of appetite and indigestion, is frequently attributed to a bad stomach. Now the truth is, that in such cases the state of the tongue and the state of the stomach are both produced by one and the same cause, *viz.* the unnatural state of the bronchial mucous membrane. In the latter tissue, the train of morbid actions commenced; and from it was derived that source of irritation which, inducing disease in the bronchial mucous membrane, caused a state of parts rapidly propagated along that membrane to the mouth and tongue on the one hand, and to the stomach on the other. We afterwards had recourse to a tonic and astringent chalybeate, the *mist. ferri comp.*, with the view of improving the general system, and checking the superabundant secretion from the bronchial tubes. The action of a chalybeate is not merely limited to strengthening the tone of the stomach and general system; it is also well calculated to arrest the superabundant secretion from mucous surfaces in many chronic fluxes, and hence its utility in gleet, diarrhoea, and chronic bronchitis. We gave the compound iron mixture in preference to a simple chalybeate, because the other ingredients, namely *myrrh* and *subcarbonate of potash*, have a tendency to produce the same effect. I do not, however, prescribe this medicine in such large doses as I have frequently seen ordered, and I never give it alone. I order a drachm or two to be taken three times a-day, and I dilute this quantity by adding to it half an ounce or an ounce of

almond emulsion or mint water. In this form it is a much safer remedy in the treatment of fluxes depending on chronic inflammation, and its exhibition is much less likely to be followed by sinister accidents. I have, in the present instance, combined with it a small quantity of squill; the reason of making this addition is so obvious, that it is unnecessary for me to do more than notice this fact. I have also added some tincture of hyoscyamus, which is an extremely valuable sedative in the treatment of many forms of pulmonary disease.

However well planned this treatment seemed to be, it did not succeed. After taking the mixture for a day or two, the man began to complain of tightness across his chest, and we were obliged to give it up. I have already stated, that in cases of this description, where the patient is using remedies to arrest secretion, you should be cautious in administering them at first, and attend carefully to their effects. If, after a patient has been using a chalybeate, or any other remedy administered for similar purposes, you find that constriction of the chest and dyspnoea are increased, no matter whether the secretion is diminished or not, you may be sure that you are doing more harm than good. When the remedy acts favourably, you may know it by the following signs:—respiration becomes less frequent, and is performed with less distress, the expectoration becomes more free, the sputa begin to assume the globular form, its quantity is diminished, and it is less tenacious and viscid in its consistence. When you give a stimulant therefore in chronic bronchitis, you must watch its effects with care, and if it produces any increase in the difficulty of respiration, or any pain or tightness of chest, you must omit it altogether, and pass to an expectorant of a less irritating character. In this case we stopped the use of the *mistura ferri composita*, and immediately ordered the patient to take a grain of tartar emetic in a pint of whey. This simple remedy succeeded in a very remarkable manner, producing on the first day a very considerable alleviation of symptoms.

A man was admitted into the chronic ward a few days ago who cannot separate the lower from the upper jaw to the distance of more than two lines. What are the cases in which we find this immobility of the lower jaw? Most commonly in tetanus or locked-jaw; but here this cannot be the case, for the man has no sign indicative of a tetanic affection, no rigidity of the muscles of the neck; his countenance is very different from that of a tetanic patient, and he has not been exposed to any of the ordinary exciting causes of that disease. But leaving all consideration of the nature of the disease out of the question, what is it that prevents him from moving his lower jaw?—It must depend on one of two causes; either the muscles which perform the motions of the lower jaw are stiff, rigid, and incapable of motion, or else there is some disease of the articulation which obstructs the

motion of the bone. This proposition is universally true of all articulations, that when they become impeded or completely obstructed in their motions, the derangement arises from some abnormal condition of the muscles, or of the bones and ligaments which form the joint.

In this case we find, that, in addition to being unable to perform the proper motions of the lower jaw, the patient has intense pain, darting from the angle of the jaw towards the temple, the ear, and the side of the neck. This pain is of an extremely violent character, so as to resemble tic douloureux, and the resemblance is still farther increased by its being more or less intermittent. Now on inquiring into the history of this case, we find that the patient had some time ago laboured under toothach, for which he got the last molar tooth but one of the upper jaw extracted, and that immediately afterwards he was seized with violent pain in the part, and found that he could no longer move his lower jaw as usual. I have seen many cases of this kind, in which a painful or carious tooth, or an injury done to the gum or jaw, has been followed by violent darting pain in the nerves of the face, simulating in many particulars tic douloureux. I remember being sent for to Middleton, near Cork, some time since, to see a young lady, of delicate constitution, whose health was materially deranged from what was said to be an attack of tic douloureux. She had been under the care of many practitioners, and had used very large doses of the carbonate of iron and sulphate of quinine, and at the time I visited her was taking arsenic. The first thing which I did on my arrival was to examine her teeth. On close inspection I observed that on the crown of one of the upper molar teeth there was a spot which appeared to be decayed, and found on inquiry that she had frequently suffered from pain in this spot when she drank any cold liquid. I had the tooth drawn, and soon afterwards the pain completely ceased. Yet in this case the pain was not only of an intense character, preventing sleep and wearing out her strength, but it had its intermissions, and was aggravated at particular hours of the day. Another instance of the same kind came under my notice about twelve months ago. A young lady was brought to me by a medical friend of her's to have my advice for an attack of tic douloureux. She had been attended by this gentleman with great care, and no mode of relief left untried, for her sufferings were intense, and she had constant exacerbations of pain. I asked him, were her teeth sound, or had she any disease of the gum or jaw? He said not, and that he was sure of this, for he had examined her teeth over and over again. On opening her mouth, however, I thought I saw some appearance of unsoundness in one of her teeth, and recommended her to go to Mr. M'Clean and get it drawn. She did so, and the pain quickly dis-

appeared. I could also give many cases in which an injury done to some of the branches of the dental nerve has given rise to symptoms closely resembling those of tic douloureux. One of the most curious circumstances connected with such cases is, that the pain is always of a more or less intermittent character. The same thing is observed in that form of headach which arises from irritation of the brain produced by spiculæ of bone growing from the internal table of the skull. In a case which occurred some time back at the Meath Hospital, where several spiculæ, some of them more than a quarter of an inch in length, were pressing on the brain, the headach was of a distinctly intermittent character. This remarkable periodicity of exacerbation, in cases where the operation of the exciting cause continues still the same, seems to be peculiar to the nervous system.

In many cases very considerable derangement of the facial nerves is found to follow an injury done to some branch of the dental nerve in drawing a tooth. When the bone has been injured by the force used in extracting a tooth, it frequently happens that, if the injury be not quickly repaired, and the parts healed up, symptoms resembling those of tic douloureux or rheumatic neuralgia will supervene, and give the patient a great deal of annoyance. Such was the origin of the mischief in the case before us; the man received an injury of the upper jaw in drawing a tooth, which is not as yet healed, as you may perceive by introducing a probe between the separated portions of gum, when you will find it grate against the rough surface of the bone. In addition to this, there is considerable tenderness of the gum and swelling of the neighbouring parts, which have extended to the muscles, their sheaths, and finally to the articulation of the lower jaw. You can satisfy yourselves of this by examining the parts and striking the lower jaw, so as to press it suddenly upwards and backwards into the glenoid cavity, just in the same way as you press the thigh bone against the acetabulum when you wish to ascertain whether there is inflammation of the hip joint. The motion of the lower jaw is here prevented by inflammation, extending from the upper jaw so as to involve its ligaments and the neighbouring muscular sheaths. There are other causes, also, which may be attended with the same diminution of motion in the joint. Thus a man may get an attack of rheumatism in the scalp, which may extend to the temporal muscles and prevent him from being able to depress his lower jaw, and I have known cases in which this condition of the temporal muscle has given rise to suspicions of the existence of trismus. When you examine the articulation you find nothing amiss, but when you come to press on the temporal muscle above the zygoma, the patient complains of pain and tenderness. The irritation produced by rheumatic inflammation gives rise to a fixed rigid state of the

muscle, and hence the patient cannot open his mouth. This form of disease I have described long since, in a paper published in the Dublin Hospital Reports. It can be relieved with great ease by applying leeches to the temple, and ordering the patient to rub over the part a small portion of mercurial ointment with extract of belladonna, two or three times a day. The same state of the temporal muscle is sometimes observed as resulting from an extension of inflammation, in case of a wound of the scalp in its vicinity.

In the case before us, almost every thing will depend on the process which Nature may adopt with respect to the injury of the maxillary bone. If the bone throws up healthy granulations, and the inflammatory process ceases, the affection of the nerves, as well as of the muscles and joint, will quickly subside. All we can do under the circumstances is to apply leeches over the side of the face, and order the man to rub in mercurial ointment; every thing, however, will depend on the turn the disease of the bone may take.

I wish to make a few observations on a case of jaundice in the Small Chronic Ward. I do not intend to enter into any particular inquiry concerning the causes of this disease; you are aware that it may depend upon many causes, upon affections of the mind, gastro-duodenitis, inflammation or abscess of the liver, the presence of gall-stones, disease of the head of the pancreas, aneurism of the hepatic artery, and, what is more remarkable, in some cases may arise without any assignable cause whatever. In the present instance it seems to have been the result of acute hepatitis. The man was attacked with symptoms of inflammation of the liver, and about a fortnight afterwards became jaundiced. It is unnecessary for me to draw your attention to the history of the case or the present state of the patient; all I shall do at present is to make a few remarks on some points of treatment.

In the first place, the jaundice is, as you perceive, of an intense character; the man is as yellow as he could be. Now this I look upon as a favourable sign; the deeper the colour is in recent cases the greater is the chance of effecting a cure. There are no cases so untractable as those in which the tinge of yellowness is so faint that you would be likely to overlook it, as in the case of a man in the chronic ward, in whom the colouring is so slight, that it requires some attention to ascertain whether he is jaundiced or not. Such a case as this is always of a chronic untractable character, and this is too frequently connected with a scirrhus state of the liver. Again, in this man's case we cannot detect any appearance of bile in the evacuations: this is another good sign. Where jaundice co-exists with bilious stools, the prognosis is, generally speaking, bad. A but slight tinge of yellowness of skin, and the continued presence of bile in the stools, are two circumstances which I always look upon as indicative of an unmanageable

and frequently incurable affection. It generally depends on a scirrhus state of the liver, or some organic derangement beyond the power of medical treatment. Again, another good sign in jaundice is, that as long as the bile is absent in the stools it should be present in the urine. If a patient labouring under jaundice has clay-coloured stools, and that you find on examination that his urine becomes heavily laden with it, it is a very favourable circumstance, for it shows that, although the usual channel for the exit of bile from the system is stopped up, Nature has provided a remedy for the evil by establishing another emunctory. You can understand then the reason of the anxiety I felt at finding that this patient's urine was becoming paler and diminished in quantity, at a time when bile was not present in the stools. In acute cases of jaundice, you should always bear in mind, that patients will sometimes have a complete suppression of the biliary discharge, followed by coma, without any symptoms of disease of the brain. Why this occurs in some and not in all cases we cannot understand, but, from whatever cause it may arise, we find that in some instances jaundiced patients become stupid and lethargic, and die in a state of confirmed coma. In such cases there is always very great danger, and where coma has appeared as a prominent symptom of jaundice, you should always give an unfavourable prognosis. I have never seen but one patient recover under such circumstances. On the other hand, it is equally curious that derangement of the urinary system is one of the most common symptoms of disease of the brain. You will therefore understand the cause of my alarm, when I observed a diminution of the urinary secretion in this patient. As soon as I perceived this symptom, though the patient had been taking mercury, and was improving at the time, I immediately administered a diuretic, and this fortunately succeeded in producing a copious flow of urine. We prescribed the following diuretic, which had not been taken for many hours, when it produced a decided determination to the kidneys:—

R. Mistura amygdalarum, ℥viij.
 Nitrat. potassæ, ℥ij.
 Tinct. digitalis, gr. xv.
 Spiritus ætheris nitrosi, ℥ij.

of which a tablespoonful was to be taken every second hour.

There is one practical remark to be made on this and other similar cases. As soon as the symptoms of jaundice begin to decline, and bile makes its appearance in the stools, you should attend carefully to the state of the patient, and note any symptom which may occur of an anomalous character. Now in this patient's case we observed that a degree of restlessness was present, which terminated in a complete want of sleep. About the time when he began to manifest a degree of im-

provement, he became quite sleepless without any evident cause, and continued so for two or three nights; and I have already stated in a former lecture that no matter when this symptom occurs, whether in fever or towards the termination of some acute disease, it always requires your attention. I therefore immediately took proper steps to restore sleep, and accordingly we find, on inquiring this morning, that he has rested well, and feels much better. The man had been taking mercury and his bowels were free, but, not content with this, I gave him a purgative, consisting of infusion of senna with electuary of scammony. This he was directed to take early in the morning, so as to secure its operation before night, and about nine or ten in the evening, after his bowels had been freely opened, he took a full opiate, which produced a long and refreshing sleep.

Before I conclude, gentlemen, allow me to communicate a few detached observations on the connexion which exists between jaundice and some other diseases, as, for example, inflammation of the joints. It is now many years since Dr. Cheyne and I attended a gentleman in Lower Mount-street, who, in consequence of exposure to cold, was attacked with inflammation of the joints, accompanied by considerable general fever; almost every joint was attacked in succession, and his sufferings were excessive. The disease bore the form I have so often described under the name of *acute sweating arthritis*, a form very obstinate and difficult to treat, and accompanied after some time with great constitutional debility. When this gentleman had been about ten days confined to bed under treatment, he suddenly became jaundiced, and it was now evident that acute but not violent *hepatitis* was superadded to the original disease.

In a day or two afterwards, a copious eruption of nettle rash, *urticaria*, appeared over his body and extremities. Exactly the same diseases appeared, and in a similar order of succession, in a man treated in the Meath Hospital, in June 1832, an occurrence which at the time excited some interest among the students, for when I observed that jaundice had supervened on arthritis, I mentioned to the class that it was not at all unlikely that the jaundice would be soon attended by *urticaria*. I was induced at the time to make this remarkable prediction, as my mind was full of the subject, having been engaged along with Mr. Porter, in attending a medical friend residing in Bagot-street, in whom jaundice was soon followed by *urticaria*. Since my attention has been drawn to the connexion between these three diseases, I have seen and heard of several other instances in which they appeared thus associated together. A circumstance so remarkable deserves to be studied with more than ordinary interest. Let us, therefore, consider what facts are supplied by physiology

and pathology capable of throwing some light upon this hitherto unobserved and uncultivated subject. In the first place, nothing has been longer recognised by physicians as an established fact than the intimate sympathy which exists, both in health and disease, between the digestive organs and the skin. Now acute hepatitis always produces more or less derangement of the stomach and alimentary canal, and we may, therefore, consider its connexion with urticaria in the same way that we are in the habit of viewing the cases, so frequently observed, in which certain sorts of fish have produced serious symptoms of indigestion followed by nettle rash. The association between these two diseases is rendered more remarkable by the fact that, when fish taken as food exerts a poisonous effect on the system, it frequently produces, not merely violent stomach and bowel complaint, but also inflammation of the joints and rheumatic pains. If I can establish this, you will allow, gentlemen, that the connexion between arthritis, disease of the digestive organs, and urticaria, can no longer be considered as fortuitous and depending on the accidental concurrence of causes having no determinate relation, but must be looked on as owing to, and arising from, the operation of some fixed law which regulates and originates this development of morbid actions in, if not a frequent, at least an uniform mode of succession.

The Otaheitan eel (*puhhe pirre rowte*) produces, when eaten, a most copious scarlet eruption of the skin, most probably urticaria, and occasions *sudden tumefaction of the abdomen*, together with swelling of the extremities, hands, and feet; the pain felt in the limbs is so excruciating that the patient becomes quite frantic. I may remark here that this, and many other species of fish which act as poisons on the system, give rise very speedily to paralysis of the extremities. You will find, in the *Edinburgh Medical and Surgical Journal*, vol. iv., p. 396, in an excellent review of Dr. Chisholm's work on the poison of fish, an account of the effects produced by eating the *muræna conger*, the following passage. "In the course of the following night they were all seized with violent griping and cholera, together with a peculiar sensation in the lower extremities, attended with violent convulsive twitches, faintings, &c. They all perceived a brassy taste in the mouth, and a rawness of the œsophagus as if it had been excoriated. These symptoms continued to afflict the negroes for a fortnight, and then terminated in paralysis of the lower extremities. After suffering for several months, they recovered with difficulty."

Are we not here forcibly reminded of what I said in a former lecture concerning the connexion between enteric disease and paraplegia?

Werlhoff, as cited by my friend Dr. Autenrieth in a book* of extraordinary ability and research, give a case where the *gadus aglesinus*, asellus, produced a violent affection of the sto-

mach and bowels together with urticaria. Chisholm relates the same of the flesh of the dolphin. Urticaria, diarrhœa, dysentery, paraplegia, are said by the same author to be frequently observed in consequence of eating the flesh of the *grey snapper*. Forster relates a similar train of accidents produced by eating the *sparus pargus* (porgee). In short, gentlemen, I could bring forward citation after citation in proof of the truth above advanced, but I have done, for enough has been already said to establish the point in question.

Having established the fact that disease of the digestive organs is often intimately associated with urticaria, it remains to prove that a similar connexion exists between hepatitis, the cause of the derangement in the digestive organs (in the case before us), and arthritis. Every one has observed how frequently inflammation of the joints becomes in its course complicated with inflammatory affections of internal viscera. In general those viscera whose component tissues are most similar to the articular, are the organs affected. Hence the heart and pericardium are so often attacked in the course of rheumatic fevers. It sometimes happens, however, although less frequently, that the internal organ attacked has little analogy in point of tissue with the joints. Thus in rheumatism and in gout, the stomach, the bowels, the lungs, or the liver may become engaged, and of these, none, perhaps, so frequently as the liver. We need not be surprised at this when we consider how intimately the digestive function is connected with arthritic inflammation, which is indeed generally preceded or accompanied by well-marked symptoms of hepatic and stomach complaints. Indeed almost all medicines that afford relief in arthritis, are attended with well-marked symptoms of their having acted upon the secretions of the alimentary canal and liver. Thus colchicum seldom diminishes the pain and inflammation of the joints until it produces copious bilious evacuations.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXIX.

Dystocia.

GENTLEMEN,—The second species of dystocia is where labour is rendered difficult or dangerous from a faulty size or form of the child. A child which is perfectly well formed, but throughout of unusual size, may prolong a labour exceedingly, and even render it difficult. Nevertheless, cases of this sort seldom

* Ueber das Gift der Fische. Tübingen, 1833.

demand artificial assistance. A pretty certain sign of the head being large is the inferior segment of the uterus being much distended, by the appearance of varices about the thighs and legs, by a considerable degree of œdema in the feet, pain in the region of the ischiatic nerve, &c.; but the experienced finger of the accoucheur will give the most certain diagnosis.

When the head is very large the cranial bones are seldom fully developed, and the fontanelles are generally very wide; hence it opposes but little obstacle, as it easily yields to pressure, and readily shapes itself to the passage through which it has to pass. When the head is unusually hard and unyielding, the bones much ossified, and even united by real sutures, the labour may be rendered exceedingly difficult; but these cases of the head having real sutures are very rare, and I doubt much if they exist. Unusually large children may prolong labour when the shoulders come into the pelvic cavity, but this is generally the fault of the accoucheur from having pulled at the wrong shoulder. The part which comes first is that which lies behind the symphysis pubis in every case. Thus, as I have before shown you, it is the posterior and superior quarter of the right parietal bone which comes out first in the first position of the head; it is the right cheek in the first position of the face. The same holds good with presentations of the nates. The longest child out of 21,000 which was observed by Duges, the nephew of Madame La Chapelle, and professor at Montpellier, measured 22 inches. It is a pity that the weight was not also accurately taken. The medium length, you know, is eighteen inches, so that this must have been an unusually long child. The average weight of a full-grown fœtus is between seven and eight pounds; but we occasionally meet with them weighing as much as ten pounds; and there are cases on record where the weight was much more. Dr. Merriam once delivered a still-born child which weighed fourteen pounds, and the late Sir Richard Crofts delivered one alive which actually weighed fifteen pounds. Perfect mentions a case where the head "was almost one entire ossification, and where it passed through the pelvis with great difficulty." I had lately a case of this sort: the patient had always had very difficult labours, owing to the narrowness of her pelvis; but, in the present instance, the head felt as hard as a cocoa-nut, and was tightly wedged into the superior aperture, the child being dead, the prolapsed cord being without pulsation, and, finding great difficulty in the attempt to pass even one blade of the forceps, I perforated, and was surprised at the remarkable firmness and thickness of the skull.

Labours, however, are seldom rendered difficult from the size of a child which is well formed; on the other hand, they are often prolonged from its having an unnatural form. Thus, for instance, it may have water in the head, the chest, or the abdomen. In cases of

the first description, the child is generally born dead or dies during labour, the head is very soft, the bones of the cranium being either imperfectly developed or sometimes entirely wanting; generally speaking, they stand considerably apart from each other, the sutures being very wide, and the fontanelles of great size. For cases of this sort the forceps are not adapted, nor is it in general necessary to use artificial means, for in most of them the head is born by the natural efforts. If, however, these be not sufficient, nothing remains but paracentesis of the head, or, in other words, perforation. It is, however, astonishing what a degree of pressure a hydrocephalic head will bear, and how it will configure itself to the passages. There are, however, exceptions to this rule, as appears from a case which Dr. Young has recorded in his Lectures. "The head was three times as large as natural, so that it rested on the brim of the pelvis, which was sufficiently large, and the pains sufficiently powerful. In this case the feet presented, and the whole child came down till it was stopped by the head; more force being used, I heard," says Dr. Young, "the head crack, and a large quantity of fluid came away, after which the head soon followed."

We sometimes meet with cases where membranous sacs filled with serum are attached to the child's head; these always arise from a suture or a fontanelle. The cerebral hernia on the parietal bone, which has been described by some authors, does not exist; cases of this sort have been evidently those of the *cranial blood-swelling*, which I shall afterwards describe to you when we come to the diseases of children. These have no communication with the brain, while the sacs filled with serous fluid have, and frequently contain brain; the spina bifida and these sacs are one and the same disease. Labours are seldom rendered difficult by the presence of these tumours: thus the celebrated anatomist, Fred. Ruysch, of Amsterdam, mentions several cases where the tumour was as big as a child's head, and one especially, where it was nearly as large as the whole body. In a similar manner the chest and abdomen may be preternaturally enlarged, either by collections of fluid, or by the unusual growth of some viscus. My friend, Professor Nægele, had once a case where the child was born as far as the shoulders without any peculiar exertion, but here it stuck, and it was with very considerable difficulty that the rest of the child was delivered. The abdomen was immensely tumefied, which he found was owing to an unusually large liver, which occupied the whole cavity. Oslander, junior, has described a case somewhat similar, where the kidneys were unusually large; and Perfect refers to another instance in the "Medical Essays and Observations," where the child was born as far as the hips, and there stuck fast from a large tumour. Cases, as you are probably aware, are on record of one fœtus within the other, but I know of no case where

the labour was thereby rendered difficult. Among the immense variety of monsters, I know of none which would retard labour, except, perhaps, twins united at the breast.

I know of a case of this sort where a woman was delivered of two dead children, united at the breast like the Siamese twins. The mother was a small, delicately-formed woman, and the children full-grown, and yet they were born by the natural efforts. If, however, the labour does become so prolonged from the faulty form and size of the child as to become dangerous to the mother, we must have recourse to instruments.

I now pass on to the third species of dystocia, where the labour is rendered difficult on account of the *faulty condition of the parts which immediately surround and belong to the child*, viz. the liquor amnii, the membranes, the umbilical cord, and the placenta.

There may be too little or too much liquor amnii. Authors have even described a *partus siccus*, but I doubt much if this exists. A deficient quantity of liquor amnii generally arises from the membranes bursting too soon. In these cases it consists merely of that which is contained between the head and os uteri, while the other portion which is between the child and fundus uteri is retained until the moment of birth. The too early escape of liquor amnii may depend on the membranes being too thin; it may be also produced by over exertion, external violence, and by rude and awkward examination per vaginam at a very early period of labour. It renders the dilatation of the os uteri slower and more painful, and frequently protracts the period of labour very considerably. Smellie considers that "labours are often rendered tedious and lingering, by the lower part of the uterus contracting before the shoulders, when the membranes break, and the waters are too soon evacuated." Sometimes, however, there is an unusual quantity of liquor amnii, in which case the contractile power of the uterus is weakened from over distension, and thus the labour is prolonged. Plurality of children will produce the same effect. The membranes may be either too strong or too weak. Women pregnant with their first child are particularly liable to have them break at an early period, and this is at least *one* of the reasons why the first labour is always longer and more painful. Whatever is the cause of this frequent premature rupture of the membranes in primiparæ is more than I can say. A great variety of instruments was invented in former times in order to rupture the membranes in cases where they were supposed to create too great a resistance; but this is very rarely necessary, and when it is the finger is usually sufficient. Instruments of this sort in the hands of inexperienced persons are very dangerous, and may do much mischief; in proof of which I will give you the following case. A friend of mine, when I was abroad, was sent for by another practitioner who, deeming the Cæsarean operation necessary, had also

requested him to bring instruments with him for that purpose. On arriving the practitioner told him that the head had not stirred in the least for several hours, and, thinking to accelerate labour, he had tried to rupture the membranes, which he had done, but nothing except a little blood came way. The patient was very hot and flushed, and the pulse much excited. On examining per vaginam, he found the os uteri so high up and backwards, that he could scarcely reach it, and scarcely at all dilated. He questioned the practitioner again, "you are sure you ruptured the membranes?" "Oh, perfectly," said the man, "but they were very tough; in fact I should have used Oslander's instrument for the purpose, but, not having it at hand, I took a common knitting needle, but the patient made great complaints, and, after all, nothing but a little blood came away." On examining the inferior segment of the uterus, he found where the fellow had been poking. As the patient had been taking hot stimulating drinks to increase her pains, my friend ordered her some cooling salines, and told him he might go home for the present, as labour would not come on for the next twenty-four hours. It not unfrequently happens that the membranes continue unruptured until they appear through the os uterium, or the head may be born with them distended upon it like a cap. There is nothing prejudicial in all this; in fact it is rather desirable than otherwise, for the distended cone of membranes assists greatly to dilate the external passages; and in cases where the cord is prolapsed, as I shall afterwards show you, it is of the utmost consequence that the membranes should remain entire, if possible, till the head is born, for as long as this is the case, the cord cannot be pressed upon. Sometimes, however, it is necessary to rupture the membranes, and even at an early period, as in cases of hæmorrhage before labour, where the placenta is not over the os uteri.

The umbilical cord may be of itself too short, or become so by being twisted round the neck of the child, but it rarely happens that labour is rendered difficult by either of these circumstances, for, even if they do, the cord is generally ruptured, and labour proceeds without further difficulty. Thus, for instance, a case occurred sometime ago at the General Lying-in Hospital, where after two or three violent pains the child was suddenly and forcibly expelled. The cord was found ruptured at about two inches from the navel of the child, which cried stoutly. After removing the child, Mrs. Wright, the late excellent matron, sought for the other end of the funis, but could not find it, she examined but could not feel it, and on introducing her hand into the uterus, found the placenta with the remains of the cord ruptured at its very insertion; so that in this case the cord could not have been much more than two inches long. The cord being twisted round the child's neck, and retarding the birth of the shoulders, I have already spoken of; it

is of very common occurrence, but cases occasionally come under our notice, where the head does not advance at all, and the labour is rendered very tedious. The presenting part has been described to advance during a pain, but retires again the moment it ceases. This, however, is a very insufficient diagnosis, for, to a certain degree, we see it in every labour when the head comes down upon the perinæum, and is merely owing to the elasticity of the parts. But where the presenting part is still in the cavity of the pelvis, and is thrust down during each uterine contraction, which is accompanied by severe and peculiar pain in the fundus uteri, and again retires during the intervals at which time it feels quite moveable, we may suspect that the cord is either of itself too short, or is become so by being twisted round the neck of the child. Professor Naegele told me of a case where labour had been retarded in this manner. During the last war he was sent for to attend the wife of a Russian general officer in her labour; the patient was past forty, and had not been pregnant for nearly twenty years. Towards the end of her time she felt no motion of the child, the abdomen was very flat, and she did not continue to increase in size. When labour came on, the nates presented, and on passing his finger into the anus he ascertained that the sphincter did not contract, and hence concluded that the child was dead. In this supposition he was soon confirmed, for as the nates approached the os externum, the epidermis peeled off. Still although each pain forced it against the os externum with much power, it retired during the intervals to a considerable distance, although there was evidently no want of space, and the passage was well dilated. The pains continued powerful, and, after a little time, the fœtus was expelled suddenly. The umbilical cord was found to be ruptured, and part of it drawn tightly round the neck into a complete noose.

The child may die of apoplexy from the tightness of the cord round its neck, as Mauriceau has very justly observed, *not* from strangulation, as some good folks have asserted. This is a very important point in medical jurisprudence. A new-born child, whose birth perhaps the mother has concealed, is found dead, with black marks round its neck, the face swelled, and more or less livid: the mother asserts that the child was born dead, and that the navel string made these marks upon its neck,—how are we to prove or disprove her assertion? This is a subject which belongs to my colleague Dr. Lister, and which demands your serious attention. In most cases the cord will be found ruptured; and where it arises from a side of the placenta, this will be partially detached from the uterus, and give rise to hæmorrhage. Sometimes, however, the cord withstands the detrusive efforts of the uterus, and the labour becomes both protracted and dangerous. A case of this sort occurred to a late accoucheur

of this city: despite of constant severe pains the head would not stir, although the os uteri was fully dilated, and the passage so roomy, that he could pass his finger round the head with ease; he applied the forceps, but although there was no difficulty in applying them, still he could not bring the head down, and every attempt produced very severe suffering to his patient; he at last perforated, and passing his hand beyond the head found the cord tightly twisted round the neck. Dr. Burton mentions a case which was protracted in a similar manner, but where the head had passed the os uteri and there remained; in this case, as in another where the cord was only ten inches long, he succeeded in breaking it, and the child followed almost immediately. Smellie gives a case where the cord was twisted four times round the child's neck, and I had recently a similar case at the General Lying-in Hospital; but Baudelocque mentions one where the cord was actually fifty-seven inches long, and was twisted seven times round the child's neck.

It sometimes, though rarely, happens that one or more *knots* are found upon the cord, and this has been considered by Levret and many others as a cause of the child's death, or at least that it would be born in a very weak and feeble state; but this is very questionable; the knot rarely exists until the moment of birth, for until the child begins to be thrust down by the uterus, it can be seldom or never drawn so tight as to obstruct the circulation of the blood, and it requires a very considerable degree of force to draw a knot upon a healthy cord so tight as to effect this. Baudelocque has not only met with single but even triple and very complicated knots tied tightly upon the cord, and yet the child was not only born alive, but remarkably robust and healthy. Circumstances, however, may occur by which the knot is gradually drawn so tight as to destroy the child, and Smellie has given a case of this sort; but it is to the late M. Saxtorph, of Copenhagen, to whom we are indebted for an admirable essay on this subject. The result of his observations coincides with those of Baudelocque, viz. that it rarely proves fatal to the child. The manner in which these knots are formed may be easily imagined; when by chance the cord lies in the form of a ring, and the fœtus happens to float through it, a noose is made, which, when drawn tight by any accident, forms a knot. The most favourable time for the formation of such knots is in the earlier months of pregnancy, when the quantity of liquor amnii in proportion to the bulk of the fœtus is so much greater than at an after period, and when its movements are consequently less impeded. The circulation in the knot will be obstructed in proportion as the knot is drawn closer; if it be merely somewhat impeded, the vessels on each side of the knot will be distended and varicose, and the cord itself, where it forms the knot, from the

constant gradual pressure of one fold against each other, will become more or less flattened. This is also an important point in medical jurisprudence, for it *has* been known that knots have been tied upon the cord intentionally, and assigned as the cause of the child's death; hence it is necessary that we should be able to distinguish them. Whenever a case of this sort comes before you, where you are told the child was born dead, and are shown a knot upon the cord as having been the cause of its death, remember *not* to attempt to loosen the knot, but inject any thin fluid into the vessels by means of a syringe, at the same time carefully noting whether it passes through or not; from this you will be able to form some idea how far this knot had been the cause of the child's death; if, on untying the knot, you find the extremities of the cord swollen and varicose, while the middle is narrower and flattened from the different folds having pressed upon each other, we may, in conjunction with the result of the injection, consider it pretty evident that the knot has neither been suddenly nor lately formed, but had gradually tied of itself; on the other hand, if after having carefully examined the cord you can discover no change in its structure or flattening of its sides, &c., you will be justified in pronouncing that the cord has not been the cause of the child's death; if it has been wilfully and purposely made, it is impossible to make the cord receive the impressions and twists which it would do if it were of long standing, still less should we find varicose distension of the umbilical vessels in a knot of this sort, for these can only result from a gradually impeded circulation.

Van Swieten gives a remarkable instance of its occurring twice so as to destroy the child in the same patient. "I had occasion," says he, "to see two instances of the birth of a dead child in one lady of distinction, where every thing was exactly and rightly formed, only the navel string was, towards the middle, twisted into a firm knot, so that all communication between the mother and foetus had been intercepted; the umbilical rope seems to have formed by chance a link through which the whole body of the foetus passed, and afterwards by its motion and weight had drawn the knot, already formed, into such a degree of tightness, that the umbilical vessels were entirely compressed, for when the knot was loosened out, all that part of the navel string which was taken into the knot was quite flattened."

The *placenta* may occasionally retard labour in different ways; thus, for instance, in twin births, the placenta of the first child may obstruct the passage of the second; this, however, is of rare occurrence, and is not of much importance. Labour may be prolonged from the firm attachment of the placenta to the uterus; in some cases the whole surface of it seems to have *grown* to the uterus; generally, however, this peculiar firm attachment

is only partial, and is probably the result of some previous inflammatory process.

"We have a few times," says Dr. Dewees, "met with difficulty in the delivery of the placenta from its excessive size. These cases have uniformly occurred in instances of premature delivery, or rather where the delivery was not premature, but where the child had died some time before its birth. In the particular cases alluded to here, the children were not found putrid, but, on the contrary, were hard and rigid though a little swollen; the funis was always much enlarged, and engorged with a brown blood, and very tender; the placenta was so large, and distended the uterus so much, as to give the suspicion, to those unacquainted with the case, that there was another child. In looking over our records of these cases, we do not find one that did not require artificial aid for its deliverance by the introduction of the hand, and in two of these the placenta was so enormously large as nearly to fill a common sized chamber pot. This prodigious increase of size appeared to be owing to the infiltration of water into the meshes of the placenta. In all cases of the kind under consideration no aid was derived from the funis in the delivery of the placenta, as it was uniformly found so frail as to permit no force to be applied to it." Perfect also speaks of a placenta which was exceedingly large, being eight inches across and two in thickness. Between the ramifications of its vessels it was in some parts corneous, and in others perfectly cartilaginous, but it does not appear to have obstructed labour peculiarly.

I now pass on to the next species of dystocia, namely *dystocia pelvica*, where labour is rendered difficult, or impossible to be completed by the natural powers, on account of faulty size and form of the pelvis. The pelvis may be perfectly well proportioned, but uniformly too small in every direction, or, as is more usually the case, it may be unequally contracted, being too small in certain directions only. As to an unusual degree of inclination of the pelvis being a cause of difficult labour, I have, I trust, already proved to you that this can have no such effect. As to the size of the apertures and cavity of the pelvis, this may vary exceedingly; we should naturally expect to find the pelvis too small in every direction in females of very diminutive stature, but this is not the case, for it has occurred much more frequently in women of a middling size, and otherwise beautifully made. In some cases it has been observed only a few lines too small in every direction, in others half an inch, and in some even an inch—this last is rare. The only specimen which I have seen of this extent is at the Heidelberg Collection. From its appearance you would take it for the pelvis of a girl of 12 or 13 years. In a pelvis of this sort the head of a full grown foetus could scarcely be born by the natural means, for it would pass through with much more

difficulty than where *merely* the antero-posterior diameter was an inch too short, from being equally compressed in every direction. I can assign no cause for this peculiar modification of defective development. The unequally contracted pelvis may proceed from various causes. Thus, in early years it may be produced by that species of mollities ossium known under the name of *ricketts*. You may know a ricketty child at the first glance, by its pale face, by the dark blue ring under its eyes, the large head, and tumid belly, supported upon two thin meagre sticks of legs: the gait is weak, and the bowels are either constipated, or there is a diarrhœa; many such children die, and those who do survive are generally more or less deformed. In scrofulous children there is also a tendency to softening of the bones. Syphilis will occasionally produce a similar disposition, but morbid growths of the bones are the more general results of this complaint; the bones of the pelvis are, however, seldom affected in syphilis. An arthritic diathesis in the adult will induce a tendency to softening of the bones, and this is not unfrequently observed: thus, for instance, a well-made woman may bear her first child perfectly well and naturally; in her second labour, instead of less, she will experience an increase of difficulty; in her third, the forceps will be required; in her fourth, the perforation; and in her fifth, the Cæsarean operation. I hope soon to be able to show you a pelvis, or rather the cast of one, where this has been the case.

As the soft state of the bones may last for some years, the process of distortion may gradually proceed to any extent. When a person stands, the whole weight of the body rests upon the base of the sacrum; in this soft state the bones yield, the promontorium sacri sinks between the two sacro-iliac synchondroses, and advances towards the symphysis pubis; hence the inclination or angle of the pelvis becomes also much altered. Where there is an equal degree of softness of the bones on either side, they yield, so that the promontory advances in a straight line towards the pubes, the antero-posterior diameter being simply diminished in length, but still dividing the pelvis into two equal halves, becoming shorter as the transverse diameter increases; but if the promontory does not advance towards the pubes in a right line, the antero-posterior diameter divides the pelvis unequally. Prof. Nægelé, nevertheless, thinks that even where the disease is equal on both sides, still we see that the sacrum is most frequently to the left side, making the right half of the pelvis larger than the left. Why this should be the case will be difficult to explain; perhaps it is, that being weak the patient tries to support herself with a stick, or catches hold of any object within reach to assist herself in walking; in doing this she naturally uses her right hand, and therefore throws the chief weight upon her right hand and left foot; in this way the dis-

ease may go on until the pelvis entirely loses its original shape, and becomes most extraordinarily distorted.

Among the pelvis in the possession of Prof. Nægelé, at Heidelberg, which I have had the opportunity of examining, are two in particular, of which I hope shortly to obtain casts, remarkable not only for the singular degree of distortion, but also for the interesting history connected with them. The largest one is from a case which occurred to him in early practice, and of which he has published an account; and, as I have a drawing of it, I will describe it to you. The patient was the mother of five healthy children, all of which had been born without any unusual circumstance attending the labours. In 1800, after the delivery of her sixth child, she began to suffer from a rheumatic or arthritic affection, which seems to have been induced in consequence of having washed some linen at a pool in winter during the first appearance of the menses after her confinement. Her walking became difficult, and this increased so much, that at last she was incapable of stirring out. In 1803, after some difficulty, she was delivered of a dead child, and the disease continued to increase. In the spring, however, of 1805, contrary to all expectation, she seemed to recover, and even resumed a little work in her garden, but her spine was now evidently distorted. She became pregnant, and the midwife, who, from her deformity, was induced to examine her during pregnancy, declared that she could not be delivered by the natural passages. When labour came on a medical man was sent for, and, on examining per vaginam, he found a most extraordinary degree of pelvic mal-conformation. With the greatest difficulty he succeeded in squeezing the top of his finger between the bones, and felt the head presenting. Being convinced of the necessity of the Cæsarean operation, and having sent for a neighbouring practitioner, he began the operation. For want of better instruments, the first incision was made with a razor, the patient lost but little blood, and having no sticking-plaster he brought the lips of the wound together with sutures. The child was dead, but the patient continued to do well until the third day, when an assistant having incautiously removed some of the bandages to dress the wound, the sutures suddenly gave way during a fit of coughing, the intestines protruded, &c., from which unfortunate circumstance she died in a day or two afterwards. An infamous article shortly afterwards appeared against the operator in one of the newspapers, which excited so much attention that the government took it up, and appointed Professor Nægelé to investigate the case. On questioning the practitioner as to his reasons for performing the operation, he said, "it was on account of the contracted state of the inferior aperture of the pelvis." This appeared rather strange, because in most cases of pelvic deformity the inferior aperture is very wide. Not being satisfied with his

reasons, although nearly three months had elapsed since her death, the grave was opened, and the pelvis was found precisely as he had described it. The spine (*showing a drawing of it*) is pressed so downwards that the superior edge of the symphysis pubes is opposite to the third lumbar vertebra; the distance of the left ramus of the pubes from the fourth lumbar vertebra is only *two lines and a half*; that of the right ramus is *six lines and a half*; the rami of the pubes form a very acute angle; in fact, the acetabula have been so pressed in that the rami are almost parallel to each other; *the transverse diameter of the inferior aperture is only one inch and nine lines*; the sacrum is so bent that it is only sixteen lines in length. You see in this pelvis a striking difference from the pelvis which I now show you, and which has been deformed by rickets in early life; in the latter the descending rami of the pubes do not approach each other peculiarly, and the inferior aperture is wide, because the lower portion of the sacrum sticks out at an angle, while its promontory is forced downwards and forwards, the size of the ilia is less than natural; whereas, in the case arising from mollities ossium, the descending rami of the pubes are nearly parallel, the inferior aperture is remarkably contracted, the ossa ilii have evidently attained their full size, and were once well formed, but at a later period, from having become soft, are, as it were, folded in halves, with a sharp edge, like a piece of pasteboard. In this pelvis (*pointing to another upon the table*) you see a similar species of deformity, and where a glance is sufficient to show that the distortion had not been produced until after the patient had attained her full growth; whereas in this (*showing another*) the mischief had evidently taken place before that period.

The other pelvis is peculiar from having the transverse much shorter than the antero-posterior diameter; but I shall not enter into any particulars of its description until I am able to show you a drawing or cast of it. I shall merely observe, that the transverse diameter of the brim is not quite an inch and a half in length, whereas the antero-posterior diameter measures rather more than two inches; this unusual conformation arises from the patient having been entirely confined to bed during the latter stages of the disease. Dr. Dewees has met with two similar cases, where the transverse diameter was shorter than the antero-posterior, but it is very uncommon; the bones seem almost entirely deprived of their earthy matter, for *the whole pelvis, together with the three lower lumbar vertebrae, weighs only eight ounces five drachms.*

At our next meeting, gentlemen, I shall resume this subject.

A CLINICAL LECTURE

DELIVERED

BY DR. SIGMOND,

At the Charing Cross Hospital, April 23rd, 1835.

Abscess of the Liver.

GENTLEMEN,—On 21st Feb., Esther Cooper, aged 36, after having been for some time attended out of the Institution by Dr. Chowne, was admitted a patient into this hospital, under my care. She is a married woman, of delicate habit and light complexion: for the last four years she seems to have been suffering from hepatic affection. During the last few months she had been an invalid, and has had within that time two miscarriages. Shortly after the last, she felt a dull pain with a sense of weight over the region of the liver, which gradually increased, and became constant. This was attended with loss of appetite, severe rigors, great thirst, sickness, dark urine, and whitish stools. About this period she became an out-patient of the hospital; a blister was applied to the part in pain, and mercurial preparations were given internally, but without affording any relief. The shiverings now became more frequent, and the pain, from being dull, suddenly became more acute. She complained of throbbing of the part, and great tenderness, particularly on pressure. A swelling was discovered which extended gradually about two inches below the umbilicus; she was unable to get any sleep. Five grains of pil. saponis c. opio were administered, and anodyne fomentations directed to be employed; she was then admitted into the hospital. At this time the swelling over the liver was very large and most painful near the umbilicus, where there was evident fluctuation.

Your lectures on the practice of physic have already made you acquainted with the nature of inflammation of the liver and its general terminations. You have now had an opportunity of witnessing a case of abscess pointing externally, upon which I shall principally dwell, without entering upon the wide field which would otherwise occupy a large portion of our time and attention.

The liver is a viscus whose sensibility is by no means of an acute nature, and although the due performance of its functions is absolutely and indispensably necessary to a state of health, yet its derangement may exist to a very considerable extent, both functional and structural, before the powers of life are endangered, or even before symptoms of a very striking character are developed. Perhaps there is no disease which forms more insidiously, and even more unobservedly, than hepatic abscess, and it has been observed by the experienced editor of the *Medico-Chirurgical Review*, that years may be consumed in its maturation, and the most observant experience may fail to detect it

when formed. It may be the termination of a chronic action, which had succeeded more acute disease, and had escaped all notice; or it may come on without being preceded by any acute symptoms, and without being at all suspected. You will find such cases related in the reports of the French hospitals; at La Pitie two are detailed where the functions of the brain, and those of the digestive organs were, in the respective cases, much disturbed, and yet no symptom of hepatic derangement was developed, and examination after death only betrayed the mischief that had occurred. In one of these cases rigors existed, and they gave rise to the idea that the patient was labouring under quotidian intermittent of irregular accession and duration.

Idiopathic abscess appears in our milder climate to be of unfrequent occurrence, though so common in hotter countries.

Dr. Roots, who gave a clinical lecture in 1833 on a case of abscess of the liver, which was punctured by Mr. Green, and terminated fatally in the course of a week, states that he has not seen above six or seven cases of abscess in the liver; and Andral, in his *Pathological Anatomy*, whilst speaking of diseases of this organ, observes, hepatic abscesses are so rare, that many authors have actually doubted their existence in these climates. In the *Meath Hospital Reports* for the year 1831, you will find three fatal cases of abscess of the liver, and it was observed that abscess of the liver, hitherto a very rare disease, was that year extremely frequent in the public institutions. One of the most extraordinary pathological phenomena, however, is a singular connexion which exists between hepatic abscess and external wounds and contusions in different parts of the body. Mr. Rose has written a very able paper on this subject for the *Medico-Chirurgical Transactions*. The French authors have also remarked the same circumstance. Biot, in his work on *Military Surgery*, tells us, that of seven soldiers who died in the *Military Hospital* at Strasburgh of wounds in the head, in the months of January and February, 1794, six showed abscess in the liver. Larrey, on opening the body of General Caffarelli, who died after an amputation of the left arm, found a large abscess on the liver. M. Curtet, surgeon of the *Military Hospital* at Brussels, after the *Battle of Waterloo*, observed numerous instances of hepatic abscess in those who died of wounds in various parts of the body. Klein, a German surgeon, asserts that the liver sympathises much more with wounds of the shoulder-joint and thorax than with those of the head.

In many cases thus described, doubtless the liver has been diseased long previous to the accident that has occasioned death; but, from the insidious nature of the disease, the symptoms have passed unobserved, but must materially have influenced the powers of nature in her process toward the cure of injuries inflicted upon her. Mr. Howship, in his *Practical*

Observations on Surgery, tells us he repeatedly found, after death, inflammation of the liver and abscess, while the troops were under canvas; and this he attributes to the severe cold incident to exposure during the winter season; and Sir John Pringle has made the same observation.

This termination of inflammation of the liver, namely, in abscess, appears to be somewhat rare in this country; and it is generally believed that there is some peculiar diathesis, which causes a tendency to it; and it has been observed that sanguine and scrofulous habits, the fair-complexioned, the relaxed, the leucophlegmatic, the enervated, those subject to bowel complaints, and the sedentary, are more predisposed to this termination. The patient whose case is the subject of our consideration, was remarkably fair-complexioned, light-haired, was previously debilitated by miscarriage, and led a very sedentary life, so that, in this instance, the testimony of other medical men is fully borne out.

Much doubt seems to exist as to the seat of hepatic abscess; some asserting very strenuously that it never occurs in the parenchymatous structure, and that true pus can only be found in the cellular membrane, between the peritoneal covering and the glandular texture. M. Louis, who at *La Charité* has minutely made the dissection of 430 persons, and examined every organ, has found five instances of purulent abscess of the substance of the liver, and not one in the coverings.

He observes, that abscesses in the liver are incurable, because he has never been able to find a cicatrix in any dead body; this is, however, not borne out by the observations of the Indian practitioners; for I find, in *Annesley's Researches*, the case of John Ritson, in whose liver was found the appearance of an old cicatrix, from which it was concluded he had suffered from hepatitis before he went to India. That abscesses are curable where the tumour points externally, and an incision is made in proper time, the case before us fully illustrates; and that both the parenchymatous structure and the peritoneal covering may be the seat of abscess, the numerous accurate dissections of *Annesley* testify. As to the exciting causes of this disease we seem to have little knowledge: the doctrine of *Broussais*, at one time much received, is now discarded, namely, that it is owing to inflammation of the mucous membrane of the duodenum; but there appears to be augmented determination of blood to the secreting surface of the liver, and that it has been usually marked by an increased secretion of bile has been observed; and probably the increased afflux of blood runs on to subacute inflammation, which is so obscure as to produce abscess before the real nature of the disease is suspected. Various theories have been advanced as to its cause when it supervenes upon wounds. *Bertrand's* opinion is, that in concussion of the brain, a greater quantity of blood is determined to the head—a

greater quantity is of course brought to the right auricle, this pressing on the inferior cava gives rise to accumulation. Ponteau thought that, instead of a greater determination to the liver, there was an obstruction there: Dessault attributes it entirely to sympathy.

When our patient was admitted into the hospital, I judged, from the tumefaction and enlargement connected with the previous history of the case, that abscess was already formed, and the treatment decided upon by Mr. Pettigrew and myself was to allay general irritation, and to promote the external pointing of the abscess; from the absence of anxiety, of oppression, and of dyspnoea, we judged that the posterior part of the liver was not the seat of disease, for the pressure on the diaphragm, which would have resulted from it, would have produced these symptoms, or had there been sickness, flatulence, difficulty of deglutition, we should have known that the stomach was pressed upon. On the eighth day of her admission, the abscess appeared to be completely formed, for the pain and tumefaction were diminished, the liver seemed to have shrunk into its natural position, and a distinct tumour, pointing externally, remained. A consultation was then held as to the propriety of proceeding to the operation of giving an exit to the collected pus, which all the medical officers attended, and the unanimous opinion was that it should be performed; accordingly an incision was made by Mr. Pettigrew with an abscess lancet where the tumour was softest and most prominent; about five ounces of very offensive pus escaped, mixed with a small quantity of blood. We had previously believed that there were two distinct abscesses, which were unconnected with each other, and this opinion was borne out by the circumstance that part of the tumour appeared still to contain a fluid, which could not be pressed through the aperture; the relief afforded was, however, very considerable, and on the second morning after the first incision, one was made into the tumour of the right side, from which upwards of four ounces of extremely fetid pus were easily pressed out, the relief was instantaneous, and an immediate improvement was visible.

The opening made by Mr. Pettigrew was with the abscess lancet, in the manner recommended by Annesley, in preference to the trocar, by which means a full evacuation of the abscess was obtained. In opening an abscess of this nature great care must necessarily be taken that it is not done at too early a period, and before the purulent formation has sufficiently made its progress towards the external surface, or before the part at which it points has become adherent to the sides of the abdomen, the longer the delay is made the more certain will you be that adhesions are formed. Another important caution is, to wait until fluctuation is perceptible, for, during abscess, great accumulations of bile form in the gall-bladder, and give rise to a tumour of this

organ, which may be, and actually has been, taken for abscess of the liver. In a case that occurred at the Meath Hospital, there was a circumscribed tumour containing fluid, into which a lancet was inserted; from this aperture some dark-coloured bile flowed. After death an incision was found in the gall-bladder, corresponding to that which had been made into the tumour. The abscess existed in the right lobe of the lung, and its contents escaped into the intestines. No bad symptom followed upon the incision made in our case, although the greater number of those which are recorded by our hospital physicians have terminated fatally, even when the first appearances have been favourable. In some cases, as those at the Meath Hospital, peritonitis has supervened; in the one under Dr. Seymour's care at St. George's Hospital, after opening the abscess, a sore of a very extraordinary character supervened, which destroyed the patient. At St. Bartholomew's Hospital, a case of abscess in the liver was admitted under the care of Dr. Latham, and a puncture made by Mr. Lawrence; the patient died on the eighth day. As the body was removed, according to the *Lancet*, through the neglect of the beadles, the examination which might have added to our knowledge could not take place.

After the operation was thus favourably terminated, the next indication was to support the general health, without too much stimulating the system, for experience has shown that, where an attempt has been made too suddenly to give support, serious mischief has been the result. A very instructive case of this kind is to be found in the *New York Medical and Surgical Register*, where, twenty days after the discharge from the abscess, the patient became completely hectic from the tonic and stimulating plan of treatment, which being laid aside and low regimen and venesection substituted, recovery took place. In such cases an inflammatory congestion still remaining, the stimulating treatment augments instead of diminishes the purulent discharge. From the moment of the operation up to the period of her discharge on Monday, not a single symptom of disease was perceptible, the restoration to health and strength was gradual, and her case may be considered one of importance to you, as students of the operations of nature, whether we look to the rarity of the disease in this country, or to the fatal results which, when it has occurred, have taken place in spite of all the skill, the practical experience, and the talent that have been displayed.

Reviews.

The Dublin Journal of Medical and Chemical Science. No. XX. May, 1835.

WE notice in our Dublin contemporary a number of original articles from the pens of men of celebrity, either in one branch of the profession or in another. The first is, "Pathological Observations on the Organs of Circulation," by Dr. Law. "Fatal Effects of a slight Wound received in Dissection." "Some Observations on Rupture of the Uterus," by Dr. Murphy. "Researches on the Symptoms and Diagnosis of Aneurisms of the Thoracic Aorta," by Dr. Greene. "Observations on Pericarditis," by Mr. Mayne; with bibliographical notices, scientific intelligence, &c.

The paper by Dr. Benson, read before the Surgical Society of Ireland, is interesting to the practitioner, especially to the anatomist, inasmuch as it describes many of the forms which dissection wounds assume, the symptoms which ordinarily accompany such wounds during their progress, the mode of their origin, and the melancholy catastrophe of their termination. We shall therefore, without apology, without qualification, and without dissenting from the opinions advanced by the author, or dissenting from the conclusions he has arrived at as the result of personal observation, state them.

After describing the case of a medical pupil who had received a scratch on one of the fingers of the right hand, supposed to have arisen from a spiculum of bone, the ordinary symptoms which ensue from such an accident manifested themselves. As these symptoms are familiar to the industrious student in anatomy, it would be superfluous to give an enumeration of them, we shall content ourselves by presenting the judicious observations of the writer.

"That it was the same disease by which Mr. Dease and Mr. Shekleton were carried off, I think no one can doubt. The colourless swelling on the front and side of the thorax; the freedom of the wound from inflammation at first; the absence of pain, redness, or swelling in the course of the limb; the appearance of a pustule, or rather vesicle, afterwards, on the little wound; the sleeplessness, the dependency, &c., convinced Dr. Colles and me that the cases were identical. Yet there was one particular in which this case differed from them. The body under dissection was far advanced in putrefaction. It was the last remnant of an extremity with which Mr. J. had been occupied for weeks. I must confess, I was not prepared for this. All that I had read or seen of wounds received in dissection, led me to agree with the experienced writer in the Hospital Reports, when he says, 'I do not think we have on record a well-marked case of this disease having arisen from the dissection of a body in which any of the obvious signs of putrefaction were present.'

"As might be expected in a class consisting of 250 young men, most of them careless dissectors, scarcely a day passes without bringing under my notice some scratch, or puncture, or slight incision. When these are shown to me, my first question is as to the freshness of the subject, and, until I met the unfortunate case just detailed, I never hesitated to speak with confidence of the result if the body were many days dead. It is true, that very serious local and general symptoms often follow these wounds, howsoever received, but the peculiar disease, so painfully forced on our notice by the death of Mr. Dease, and Mr. Shekleton, could not, as I thought, have its origin from a very stale subject.

"The consequences of slight wounds received in the dissecting room, have presented themselves to me under a variety of forms. I have seen:

"1st. A small pustule, unattended with much pain, confined to the skin, and disappearing in a few days.

"2nd. A chronic inflammation, confined to a point under the skin, causing little or no uneasiness, not suppurating, but leaving a very small, hard, tumour, which, after remaining many months, gradually disappeared.

"3rd. An erysipelatous inflammation around the wound, which slowly creeps along the finger to the hand, and remains for two or three weeks wandering about the fingers, after the wound has been quite healed.

"4th. Violent inflammation of the injured part, with intense pain, followed by sloughing of the skin and cellular tissue in the immediate vicinity.

"5th. Inflammation of the sheaths of the tendons, as in severe paronychia.

"6th. Inflammation not confined to the part, but running along the superficial absorbents. The glands in the axilla suppurate. There is much local and constitutional suffering.

"7th. The deep absorbents appear to be engaged. Some red lines may be observed on the hand; we lose them in the arm, and again we find them in the axilla, with inflamed glands going on to suppuration; high fever; intense pain.

"8th. Lastly, as in Mr. J.'s cases, the constitutional symptoms show themselves before the local. Fever of the typhoid character. No sign of active inflammation in the wound, but a vesicle or pustule often forms on it. Absorbents not inflamed, but there is diffused inflammation and suppuration in the cellular tissue of the pectoral and axillary regions.

"This last case heretofore appeared to me to depend on the absorption of a peculiar animal poison, generated, in some way, at or about the time of death, and losing its specific virulence when putrefaction occurred. The others, I conceived, arose from an irritating substance of no specific nature, and assumed their different characters from the texture wounded, the irritating qualities of the matter

introduced, or still more from the state of the patient's health at the time of the injury, and the peculiarities of his constitution.

"We must, however, with this case before us, admit, either that there is no peculiar poison giving rise to this form of disease, or that it resists the changes which, from its animal nature, we would so decidedly expect it to undergo when all around is suffering decomposition. Can symptoms such as his, so different from the other classes stated above, have their origin in a common irritant? How is it that the absorbents and their glands escape, whilst the cellular tissue at a distance, or only remotely connected, becomes so profoundly engaged? Is the active inflammation a cause or consequence of a retardation in the progress of the irritating matter. Again, as to the treatment. What plan is most likely to succeed in cases such as Mr. J.'s? is it the stimulant or the antiphlogistic? When the symptoms are fully developed, Mr. Colles thinks we must place our chief reliance on calomel; I am inclined to agree with him. Mr. J. got it freely, but he died before salivation was produced, and, therefore, we cannot judge of its efficacy fairly. His gums were spongy; another day would have thrown light on it. In all cases of dissecting wounds, I advise the part to be well sucked, and then dipped in spirits of turpentine; a generous diet, and good air, from the receipt of the injury; and when a smart inflammation sets in locally, I generally consider the case will end favourably."

Researches on the Symptoms and Diagnosis of Aneurism of the Thoracic Aorta. By GEORGE GREENE, M.D.

The difficulty of detecting the existence of aneurism of the thoracic aorta is very generally acknowledged. Laennec expressed it as his opinion, "that, in the present state of our knowledge, there assuredly exists no certain means of ascertaining the existence of this disease, until it shows itself externally, and that even when the tumour has made its way through the parietes of the chest, it is not always distinguishable from tumours of a different kind." It is now, however, with great reason supposed, that the inventor of the stethoscope undervalued its powers in detecting the disease in question; and in particular Bertin and Dr. Hope state, that with its assistance the diagnosis of aneurisms of the aorta does not present more difficulties than the diseases of the heart and lungs. In proof of this, the author details some cases of aneurism of the thoracic aorta, in which a correct diagnosis was given, in the absence of any external symptom, and where the principal signs were obtained by careful and repeated examinations with the stethoscope.

We give an extract of one of the most interesting cases recorded by Dr. Greene. This case was first diagnosed by Dr. Stokes, at the Meath Hospital, and subsequently by the author and Mr. McDowell, at the Richmond

Hospital, both of whose notes of the case are here given:

"*Suspected Aneurism of the Arch of the Aorta.*—Michael Hughes, a butler, *ætat.* 38, a stout, well-made man, was admitted into the Meath Hospital, complaining of great dyspnoea, cough, and wandering pains about the back and chest. The whole of the chest sounds clear on percussion. Respiration in the right lung intensely puerile, altogether absent in the superior portion of the left, and only feebly audible in the inferior portion. On applying the stethoscope to the left axillary region, and the patient being desired to draw in a deep breath, no sound is heard during the first half of inspiration, but during the latter half the air appears to overcome some obstruction to its entrance, and suddenly rushes in to expand the lungs. The left side of the chest is almost immovable during respiration, but the right acts freely. On applying the hand to the upper part of the left side, no vibration of the voice could be detected. The vibration is very feeble below on the same side, but well marked on the right side; impulse and sounds of the heart natural; a strong double pulsation is heard over the sub-clavicular region of the left side, also over the postero-superior portion of the same side, and on applying the hand over the former situation a distinct impulse is communicated to it; no bruit de soufflet could be detected. The cough is loud and ringing, and of a peculiar croupy character; expectoration scanty, consisting of frothy mucus; respiration hurried; pulse 86, and moderately full; tongue clean; appetite good; never had any difficulty in swallowing, or pain in the throat. He attributes his complaint to cold caught five months ago from sleeping in a damp pantry; shortly after which he became affected with perspirations, wandering pains in the back and sides, increased upon exertion, and attended with some dyspnoea. The pain in the back he describes as being of a lancinating character, resembling that which would be inflicted by a knife. The distress of breathing increased, with inability to use any violent exertion, and after some time was attended by a loud dry cough. The treatment since he entered the hospital has consisted chiefly in local depletion, together with small doses of tinct. digitalis.

"May 2nd. A strong double pulsation is now heard across the right clavicle; the pulsation has increased in the sub-clavicular region, and also over the scapula, with a strong impulse below the middle third of the clavicle: after the patient walking several times up and down the ward, a sharp well-marked bruit de scie was detected in the latter situation. It disappears, however, after the patient has remained quiet for a short time, and again returns after exercise.

"I shall now insert the report of the physical signs taken from the case-book of Mr. M' Dowell, at the Richmond Hospital,

“Anteriorly, the right side of the thorax sounds well on percussion; a little dullness in the sub-clavicular and mammary region of the left side; respiration in the right lung remarkably loud and clear, very obscure in the left lung, except on taking a deep inspiration, which produces a feeble vesicular murmur. A strong impulse communicated to the stethoscope, two inches below the clavicle, and about an inch and a half to the left of the median line of the sternum; impulse also perceptible across the sternum to the right clavicle; it is greater than that of the heart, and appears to be double; it is also perceptible to the hand. A slight impulse communicated to the stethoscope at the left side of the second and third dorsal vertebræ; no bruit de soufflet could be detected in this situation, nor anteriorly, except after great exertion; pain on percussion of the upper third of the sternum, and in the situation of the vertebræ above mentioned. His general symptoms are, severe cough of a shrill croupy character, attended with copious frothy and purulent expectoration. Excruciating pains of a lancinating character, extending from the superior part of the chest in various directions; urgent dyspnoea, and copious perspirations, confined to the head and chest; does not complain of difficulty of swallowing; the jugular vein of the left side distended; pulse in both wrists the same; does not complain of numbness in his arms, nor is there any œdema of the upper extremities; impulse, and sounds of the heart natural. These symptoms increased progressively, for which he was occasionally bled, and put under the influence of digitalis, with counter-irritants. Nothing, however, appeared to give him decided relief, and he expired suddenly one night during a fit of coughing; at the same time spitting up a quantity of blood.

“On dissection, an aneurismal tumour was found arising from the descending portion of the aorta, and pressing upon the left bronchial tube, which was considerably indented and narrowed. The posterior wall of the sac was made up by the bodies of the second and third dorsal vertebræ, the osseous portion of which was absorbed, and presented nearly the same appearances as in the case last detailed. The interior of the sac was lined with a fibrous coagulum, and it opened into the left bronchial tube; the œsophagus was slightly pushed to the left side; the interior of the aorta was crowded with atheromatous depositions between the internal and middle coat; the heart and pericardium were natural.”

Dr. Greene alludes to the obscurity which still attends the diagnosis of aneurism of the inferior descending portion of the aorta, an obscurity which does not attach in so great a degree to aneurisms of the different portions of the arch.

The author considers the principal symptoms and signs would be as follows:

“1st. An impulse limited in extent, and decreasing in intensity as the stethoscope is

applied above or below the situation of the suspected tumour. This sign is more valuable, if it occurs on the right side of the spinal column, which is not the situation, anatomically speaking, where an impulse should be perceived.

“2nd. A bruit de soufflet or a bruit de râpe, heard in the suspected tumour, and not observable in any other considerable portion of the aorta or in the heart. It is necessary in every instance to examine the heart, for, within these few days, I have met with a case, in the Whitworth Hospital, where a loud bruit de râpe accompanies the second sound of the heart, this bruit is heard down the spine along the course of the aorta. It is heard also in the carotid and brachial arteries, even to the elbow-joint. I have satisfied myself that in this case a double sound is heard in these arteries. The name of the individual in whom these phenomena occur, is William Connor, and several of the class of the Whitworth Hospital have heard both the bruit and the sounds in the situations mentioned.

“3rd. The production of pain on pressing the vertebral column over the site of the impulse.

“4th. The production of pain referred to a portion of the lung near the situation of the impulse, on a forcible inspiration.

“5th. Dysphagia referred to some point below the middle third of the sternum, or to a point nearly opposite the impulse.

“Lastly, it may be worth while to contrast the pulsations of the abdominal aorta in the epigastrium with other arteries and with the impulse of the heart.

“We should take into consideration also (provided the above signs are well marked) the evidence we may obtain with respect to the position of the tumour from the absence of some symptoms: such, for instance, as the non-existence of a laryngeal croupy cough; difference of pulsation in the two radial arteries; or numbness or œdema of the upper extremities.”

The articles in this Journal are excellent, and the general contents do no discredit to the celebrated editors.

A few Practical Observations on the Art of Cupping. By Joseph Staples, Cupper to St. George's Hospital, &c.

WE are convinced, and so are the majority of our readers, that dexterity in performing the minor operations in Surgery is of as much importance in enhancing the reputation of a practitioner, as if he could tie the subclavian or the internal iliac with facility. This position has been placed in so clear a light by surgical writers—need we only name Alcock?—that it is quite unnecessary for us to repeat them. If a young practitioner be called to a patient for whom the operation of “Cucurbitulum cum ferro” be required, and he has frequently performed this operation, he dexterously avoids the trickling of blood down the back, draws a sufficient and proper quantity of blood in a

moderate period of time, and neither breaks the glasses, scorches the patient's skin with the torch, nor destroys it with the heated rim of the glass, and avoids a variety of other such errors, which a tyro is liable to commit, he will undoubtedly acquire the esteem of his patient. If, on the contrary, he commit all those blunders—nay, even one of them—discomfiture in the patient, and perturbation may probably appear. "First impressions often continue:" this is an old adage—seldom, however, is it adduced in reference to this subject. Better if it were! The humble author of this (what shall we call it?) book dedicates it to the Physicians and Surgeons of St. George's Hospital, &c. In the preface he observes, that he "was induced to throw together the following observations, by having witnessed gentlemen of excellent education, and competent to perform the most important operations, making the strangest mistakes when they attempted to abstract blood by the cupping-glass." This is a modest observation. Let it pass. We find nothing certainly in the book that is new. The manner in which cupping is to be performed on various parts of the body, is very concisely described; but such a book is not required: it would occupy about, certainly not more, than four pages of our journal. Vide the price!

After the works we have on the subject by Mappleson, and particularly by Knox, "Art of Cupping, &c." a very valuable little book, we do not think the author was justified in imposing this, as he has done, on the list of subscribers he has presented to us in the appendix.

Review of an Historical Essay on Dupuytren.

BY M. VIDAL.

The death of Dupuytren operated somewhat like a political event. For three days the columns of all the principal journals, both of England and France, were filled with details concerning the character, life, and death, of this celebrated man, and of the scientific cortège which accompanied his mortal remains to the tomb. By degrees, however, this clamour subsided; his ashes were suffered to repose in silence, and, like all other transitory events, the death of Dupuytren was altogether forgotten. We have, indeed, the hope of two or three funeral orations, a tribute due from every Academy; but funeral orations, from their very nature, are too laudatory to be trusted to—they ever voluntarily hide every truth that may appear disparaging to their subject. But M. Vidal, in one simple notice, with the unpretending title of "Essay," has exhibited Dupuytren in his character as a man and as surgeon with admirable spirit, and with just and enlightened criticism.

It is well known that Dupuytren was brought to Paris, when yet very young, by a cavalry officer, who read, it seems, in his countenance a part at least of his future destiny. Previously to this event he had already, at the

age of three years, attracted the notice of some rich traveller, and been taken from his family, but his father re-claimed him, and he was restored with regret.

At Paris, Dupuytren's abilities soon became known to men capable of appreciating them. The philosopher Saint Simon, the same who has been made a god for want of a better, mounted the student's garret one day; the weather was excessively cold, and Dupuytren was studying in his bed. The philosopher seated himself on *un poel glan*, and, having chatted a little, rose and departed, leaving 200 francs on the *poel*. Dupuytren found the money, ran after Saint Simon, and presenting it said, "Here, sir, is what you left behind you." "True," answered Saint Simon, and took the money.

M. Vidal follows Dupuytren in his rapid career; exhibits him in the Hôtel Dieu, severe with the students, peremptory even to rudeness with the patients, amiable and gentle towards little children. He then endeavours to analyse the genius of the surgeon, whether when in a case of difficulty his peculiar diagnostic power was especially called forth, or when in the amphitheatre surrounded by an audience listening as to the words of an oracle. In all these appreciations M. Vidal shows great judgment and ability; but we cannot agree with him when he denies to Dupuytren the spirit of innovation, "if by that we are to understand the doing what Paré, Franco, J. Hunter, Pott, and J. L. Petit have done." This sentence is severe, coming from one whom we cannot tax with injustice towards Dupuytren. The question is nevertheless of easy solution. Let the discoveries, or what are so called, with which each of those celebrated surgeons have enriched science, be compared with those of Dupuytren, and we venture to affirm that he need not shrink from the comparison. But our limits do not allow us to enter further on the matter; the first point of the question is—what is meant by *discoveries*.

Dupuytren's surgical works are:

- 1st. *Un Mémoire sur les Anus contre Nature.*
- 2nd. *Un Mémoire sur les Ligatures des Artères, substituées à l'Amputation dans les Cas de Fractures compliquées d'Anévrismes.*
- 3rd. *Un Mémoire sur la Ligature des Principaux Troncs Artériels.*
- 4th. *Un Mémoire sur la Fracture du Péroné, et sur les Accidens qui en sont la Conséquence.*
- 5th. *Un Mémoire sur les Luxations Congenitales du Fémur.*

We might add to this list many other works—a Memoir on Luxations of the Vertebrae, &c.; but we know that Dupuytren's most esteemed labours were taken and published from his lectures delivered in the theatre of the Hôtel Dieu, by his own dressers, and afterwards again corrected by himself; of the value of which we cannot speak in too high terms; many of them have we laid already before our

readers; and we shall not consider that we have done the name of this great man justice, until we have completed the whole of them in our pages.

REMARKS ON WATER DRINKERS. 1

A Letter from MR. CHAPMAN to DR. GRAVES.

To the Editors of the London Medical and Surgical Journal.

SIR—A friend has put into my hands the *London Medical and Surgical Journal*, No. 161, Vol. VII. for February, 1835, which commences with a lecture by you, and in which you say you are “confident, if the whole British nation drunk nothing but water for the next twenty or thirty years, they would not be as fine and as vigorous a people as they are at present;” and “that, if all mankind were to become water-drinkers, they would, in the course of a few generations, realise the poetic idea of the degeneracy of the human race.”

I believe, sir, you are greatly mistaken, simply because I know that great numbers of men here, employed in the various laborious trades of this town, find that, changing from ale entirely, and all fermented drinks, to a generous meat diet (including bread and vegetables), they have gained a considerable degree of bodily health and strength. In general they appear thinner, but in a few months they are usually found to increase in weight. I do not refer only to men who have drunk to excess; but to all kinds, sober and drunken, and the result is the same. The evidence is so decisive, that medical men have, to me, most readily admitted that it has changed their views. I believe that to men in health all fermented liquors are needless; to most men, though moderately taken, (if strong) injurious; and to many, ruinous to their health from producing indigestion. Since I became an abstinent myself, I have derived considerable advantage from it; yet my life is one of unceasing activity. I enclose a tract for your perusal. You may perfectly rely on the facts.

I do not agree to the second extract, simply because I happen to know, on the best authority possible (short of ocular demonstration), that the natives of New Zealand are a larger, stronger, and more active race of men than ourselves; and yet they use no stimulant at all, as liquors or condiments, and, till lately, had no animals whatever to use for flesh. The skill and energy with which they use their paddles far exceeds the powers of our seamen.

I assure you, sir, I would not have ventured to question any medical fact you might have stated; but as you have formed opinions, though they may arise from medical reasonings, at variance with positive facts, it really does appear proper that you should be aware of them, and I am sure I need only say that your candour is relied on to procure pardon for the intrusion. But indeed, sir, I have, and

ought to have, a higher motive than the mere refutation of individual opinion. If mankind can only be convinced that fermented liquors are needless, and experiments on the largest possible scale can be brought to prove the truth of the proposition, then I maintain that the human race is interested in the discovery, and Medical Science, with a faithfulness worthy of its present high character, will not hesitate to make the best use of the discovery. I am anxious, therefore, that such facts should not only be known to you, but that they should become, as they ought to be, objects of scientific enquiry.

Now if men, exposed, as ours are, to heats and colds, and all the vicissitudes of a manufacturing life, have, for months together, ceased from fermented drinks altogether, and gained both health and strength, I really cannot see how such a stock can degenerate. I might also cite the case of more than 1000 vessels from America sailing without any “strong drinks” to all parts of the globe, as a proof that they are needless.

I have the honour to be, Sir,

Your very obedient servant,

W. C. CHAPMAN,

Sec. Birm. Temperance Society.

To R. J. Graves, Esq. M. D.

Birmingham, 10th March, 1835.

Reports of Societies.

MEDICO-BOTANICAL SOCIETY.

April 21st, 1835.

H. JUDD, Esq., in the Chair.

ON the table was exhibited a number of fine samples of genuine drugs of the narcotic kind, from Mr. Battley. Amongst these were the belladonna, hyoscyamus, hemlock, aconite, strychnos, nux vomica, &c.; besides which were exhibited the alkaloids or active principles of several articles of the materia medica, as morphia, emetine, strychnine, Prussic acid, &c. On these the senior secretary, Dr. Sigmond, made some valuable remarks respecting their history, production, general operation, uses in medicine, &c. The strychnos nucis vomicæ are brought from India, where, under the name of isagur, they are esteemed as a remedy in almost every kind of malady. They are much employed on the continent, in Germany especially, and Dr. Hancock bore testimony to their great value, as forming one of the most useful remedies in diarrhœa and dysentery, the seeds being toasted and ground in the manner of coffee. It is used in the dose of from two to six or eight grains. Although but little employed in medicine in this country, they are imported in large quantities from the East; in what manner this narcotic drug is so largely consumed it is not easy to determine, unless it be in the pro-

cess of brewing, or for *improving* malt liquors. He (Dr. H.) has been told that there are works in London expressly for the purpose of reducing these seeds into powder; they render liquors *heady* or narcotic, and, being withal excessively bitter, may partly serve as a substitute for hops; it was considered a matter deserving legislative inquiry. The *strychnine* prepared from the seeds is by some regarded as an uncertain and dangerous medicine, but not by the generality of practitioners. Amongst other articles on the table were specimens of the genuine Turkey opium, such as is rarely found in the shops, it being almost always adulterated prior to importation, and very frequently afterwards.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 28th, 1835.

HENRY EARLE, Esq. F. R. S., President, in the Chair.

This evening Dr. Sims presented his Paper on "Serous Apoplexy," of which, from its length, only a portion was read by the Secretary. The history, symptoms, and post mortem appearances of upwards of twenty well selected cases were omitted, and only the remarks attached to each case by the author were given, which prevents our attempting fully to do that justice to the author's production, which the interest of the subject otherwise would demand from us.

It is necessary to state that the Secretary, prior to selecting such parts as a hasty glance only dictated, mentioned, that the author had kindly acceded to the omission—"Certainly!" But we would ask, did the Doctor undertake the trouble that he must necessarily have encountered at the bedside and in the dead house to accumulate the matter presented, to have it, we must term it, thus sacrificed, as far as regarded his object for the advancement of the Society?—Certainly not!!

The author in his paper had two objects in view: 1st. To explode the term of "serous apoplexy," which he regarded as equally absurd in theory, as dangerous to pursue in practice; and the author considering those cases, which are too generally termed serous cases, to be simple sanguineous cases of apoplexy, which he had ample opportunities of proving, afforded by the extensive practice attached to the St. Marylebone workhouse.

2nd. The serous effusion frequently found within the cranium ought not to be regarded invariably as the cause of death, as numerous cases had presented themselves to the author's notice, where the patients had died of other affections, unconnected with the effusion, although the great quantity of serum found effused, coupled with the appearance of the brain, must have existed a considerable time prior to death, but producing no symptoms during life as indicative of its presence. In

the course of the brief debates that ensued, the production of the fluid and absorption of the brain advanced by the author proved a stumbling-block to Mr. Langstaff, who (Mr. L.) maintained also that a deposition of bony matter takes place on the exterior, and not the interior, of the bones of the cranium.

The President, in refutation that bony deposition occurs on the exterior, and not the interior, causing absorption of the brain, related two cases; in one of which the deposits had taken place to that extent, that the calvarium measured upwards of an inch and a half in thickness; but in other places of the skull the reverse had occurred (diaphanous), and still neither condition was suspected during life, although a large portion of the brain was found atrophied.

It was also argued, but not conclusively for want of proof, that the loss of weight, occasioned by the absorption of a portion of the brain, was in ratio to the quantity or weight of the fluid effused.

BIRMINGHAM EYE INFIRMARY.

On Friday, the 24th, a general meeting of the subscribers to this Institution was held at the Public Office, to appoint a third surgeon, Mr. Hodgson having resigned.

Sir Edward Thomason was called to the chair, who noticed the retirement of Mr. H. in the following terms:—"I have to regret, in common with every subscriber to this Institution, and, indeed, with the inhabitants of this populous town and neighbourhood, that the principal cause of our being called together this day is to confirm the resignation of the founder of this humane charity, by whose extraordinary exertions, in conjunction with his colleagues, we have gratuitously given relief to upwards of 17,000 patients in the space of eleven years. Gentlemen, no expression of mine, whatever figurative language I might use, can in the least enhance or elevate the high sense of feeling the subscribers entertain for the splendid professional talents of Mr. Hodgson. Indeed, gentlemen, it is truly gratifying to reflect that this *planet of surgical skill* has always been ready to impart his professional acquirements in the interwoven, delicate, and complicated disease of the eye, to the two *satellites* who revolve in the same honourable and humane circle for the benefit of mankind, and whose combined intelligence, labour, and assiduity, now rank them to be part and parcel of this talented planetary system. And, gentlemen, it is also gratifying to find that these gentlemen are desirous to enlist into their circle of occupation an assistant, so that not one link of the chain of this golden charitable institution shall be broken; but, by enlarging its sphere of action and vigour, it may increase its valuable operations to all who may appeal for such important relief. And I feel assured, gentlemen, on whichever candidate your choice may this day fall in the election of a third sur-

geon to the Infirmary, that we shall ultimately find in him qualities alike deserving the thanks and gratitude of our town and neighbourhood, as this meeting is at this moment bound to concede to the present professional managers of this valuable institution."

Mr. Middlemore, who has discharged the duties of Assistant Surgeon with great zeal and ability for seven years, was unanimously elected Surgeon, and Mr. D. W. Crompton, Assistant Surgeon.

THE

London Medical and Surgical Journal.

Saturday, May 2, 1835.

PRESENT PROSPECTS OF MEDICAL REFORM.

THE effort at reform which has just taken place among the teachers in the medical school of St. Bartholomew's Hospital, will, we hope, ere long, be imitated by other schools in the metropolis, and one desideratum, at least, in furtherance of a sound professional education be thereby obtained. Long as the improvement proposed has been required, it is yet some consolation to know that it cannot be much longer delayed, since the senses of those, hitherto considered most backward in carrying it into effect, have at length been touched, if not with something like remorse for past delinquency, with the conviction of its necessity.

It is true, this is but one of the many steps which must go to complete the ladder of an efficient reform, but, when the authorities by which it is recommended are considered, it is a very important one. For emanating as it does from the most celebrated medical school in the metropolis, a great portion of weight must be unavoidably attached to it, and the onward progress of what has been the subject of discussion for many years past, viz. an effective reform of our medical institutions, accelerated.

In the meantime it is not a little surprising to behold the apathy in which our

time-stricken and vacillating Colleges of Physicians and Surgeons are plunged. The spurring which has been administered to their antique hides by a host of some thousands of members and licentiates belonging to their crazy empire, all intent upon the correction or extinction of innumerable abuses, appears to have but little effect. Their slow and solemn march defies both spur and goad, and seems to hold a pace quicker than the crawling of a snail, as unbecoming and derogatory to their owl-like dignity. There must, surely, be something exceedingly pleasing and refreshing to the performers in this lazy race, or they would not defer their gallop (for to that it must come) to the final hour of endurance. Some among them whose scalps time has whitened and hardened in an equal degree, might be excused their want of watchfulness of external circumstances; but others, whose lack of agility and perception cannot plead that "reverend excuse," would do well to comport themselves a little more in accordance with the thousand times expressed opinions of the public, and their professional, though degraded brethren. These know full well the miserable state of the medical laws which misgovern them, and feel shame and indignation that, session after session, the government has passed over their grievances, with either no notice, or, such as has brought no relief to their manifold wrongs. And, with respect to the public, enough has been read by it to convince every enlightened, every liberal minded man of the inadequacy of our corporations, in their present state, either to advance our science or protect its practitioners. Indeed the lay community believe there must be something rotten in a state of affairs which admits of no spontaneous reformation, and are fast coming to the conclusion that the inabi-

lity exhibited by the Council of the one institution and the Fellows of the other, to effect anything in the way of an amelioration of their high and bye laws, arises from the feebleness of downright gangrene in their constitution, and assert that it would be easier and more advisable to form establishments for the protection and advancement of our profession, *de novo*, than to arrest the progress of the inveterate malady clinging to the vitals of those now existing.

It is unfortunate for the immediate prospects of medical reform, that so great a portion of the present parliamentary session has been exhausted by our "legislative wisdom" in the decision of a battle, the triumph arising out of which bids fair to retard for another year the settlement of our professional question. Had the late ministry yielded at first with a good grace to the expression of the public voice, and shown less leather-headed endurance of buffeting, some progress, in all probability, would before this have been made towards getting up the report of the Medical Committee, and our hopes, so long deferred, have made a few strides towards their completion. But, as it is, the process of sifting and digesting, and, perhaps, more sittings, are to be gone through, and before this can be accomplished, the session will have ended, and our corporate salamanders have another period of breathing-time added to the many they have already so cleverly contrived to obtain. We counsel them to use it discreetly, and most especially exhort them to take physic for their lethargy, so that they may be, in some sort prepared, when the proper moment arrives for them to be forced into the gallop to which, we still fully believe, it is Mr. Warburton's intention to treat them.

In the interim, we repeat, we are not

without hopes that the example set by the medical officers of St. Bartholomew's will be followed, if not in all, in many instances, by the other medical teachers in the metropolis and elsewhere, thus giving, as it were, an impulse, *à tergo*, to the stagnant current of reform in our head quarters of monopoly and abuse.

ARRANGEMENT UNDER THE NEW POOR-LAW ACT FOR MEDICAL AT- TENDANCE ON THE POOR.

WE have received several communications in the course of last week from medical gentlemen residing in and near those parts where the Poor-Law Commissioners are already dividing and subdividing the surface of the kingdom into pauper districts. The letters we have received are for the most part couched in the language of complaint, and indicate a dissent to the mode in which the said Commissioners propose providing medical attendance upon the subjects of their especial dominion—the poor. One correspondent, who seems to have been underbid by a young gentleman from London, expresses much regret that the system of *contracting* for attendance on the poor should be adopted; and we certainly think such a proceeding savours rather of putting the health of the paupers up to auction, to be knocked down to the lowest, not as in ordinary traffic, the highest, bidder. The system, however, such as it is, is not of very recent growth, it having been long ago acted upon in numerous towns and villages throughout this pauper-ridden country. We have, nevertheless, a pretty decided abhorrence of its working, as we conceive there is something derogatory to the dignity of our profession, in the underselling and tradesmanlike proceedings

to which it gives rise. We could therefore wish that an *esprit de corps* of a different tendency animated our already too often ill-requited but laborious brethren.

We are aware that economy of expenditure is in these cases the order of the day; but this virtue, like all others, has its bounds, and it behoves the cultivators of it not to permit it to degenerate into the meagre sin of parsimony, more particularly in the matter of remunerating medical officers.

“Est modus in rebus, sunt certi denique fines,
Quos ultra citraque, nequit consistere rectum.”

And most assuredly the hard duty, and frequently the highly disagreeable offices which fall to the lot of the medical attendant on the inmates of a parish poor-house, would seem to demand a liberal compensation. That it has not been the custom of those entrusted with the guardianship of the poor to award such compensation, except in very rare instances, is a notorious fact; and their being able to act thus shabbily towards us, arises from that competition and rivalry which, however becoming in dealers and traffickers, ought not to have a place among the professors of an enlightened science.

Before quitting this subject we take leave to offer a few hints to those who may choose to become candidates for these posts, which are now advertised in the daily papers for competition. It may be easily foreseen that they will be no sinecures; and, as hard labour and short pay generally go hand in hand, it would be well, before accepting the humble bait held as a lure, and contracting to perform services, the extent of which is not in many instances ascertainable, to get some information with respect to the number of the “lame and halt” to be dealt with, and also the distances likely to be tra-

velled over in the daily discharge of the duty. The guardians of the poor should also, if practicable, be induced to alter their scheme, of grinding down the remuneration to the smallest modicum that competition can make it, for one a little more straightforward and just; that is, let them assign a certain sum, of which they may be tolerable although not liberal judges, as a stipend. This would obviate much disappointment, and be more in unison with professional respectability. We have our fears, however, that the miserable pittance doled out by employers to qualified assistants will induce many of them to leave the counters of their taskmasters and embark for very inadequate remuneration in this poor-law speculation; and, until times alter, and the profession is purged of its present impurities, perhaps there is no remedy but to submit to the imposition, arrant as it is.

Foreign Medicine.

Curious Case in which an Ear of Rye passed from the Stomach or Intestine to the Skin.

BY DR. ACASSAT.

A little girl, about three months old, whose parents reside at Montmartre, about a month since, without any appreciable cause, suffered from gastro-intestinal irritation, which in the course of a week terminated by causing an enlargement in the region of the liver; a little matter formed here, and the abscess broke spontaneously, when part of a straw could be seen. The mother of the child, rather surprised at this occurrence, drew it out to the length of an inch, but as it resisted her efforts, she gave up her attempt, fearful of its breaking; her husband finally succeeded in extracting an ear of rye, similar to those of which the bed was made. Purulent and fæcal matter followed its extraction. The opening closed in forty-eight hours, and then the child was apparently doing well for a week, when it became lenteric, and it continues so at the date of report, three weeks after the rye was passed. There is every reason to believe that a communication has been formed between the stomach and transverse arch of the colon.—*Bulletin Générale de Thérapeutique.*

Case of Dementia, with Slight General Paralysis—Softening of the Cerebrum.

—Manche, aged 32 years, appears to have enjoyed good health, but is now suffering from the consequences of his complaint. When asked his age, he replies about twenty, but at the same time avers that he is older than his brother, who has reached his 40th year; the apparent contradiction ceases, for Manche declares that he died some time since, but had afterwards the good fortune to return to life. He is exceedingly rich, having many millions to meet even his daily expenses; he is very happy, a prince, and will only consort with princes. From the moment in which he enters into conversation with any one, he grants him honours, estates, and castles, in order to raise him to his own level. It would have been fortunate if Manche were always thus satisfied, but, as partaking of the doom of mortality, he also had his troubles; he would cry like a child at the slightest contradiction. He is constantly demanding an increase in the quantity of his food, and a man who possesses millions is happy when he gets a little wine. Manche would not refuse even a sous, as it would render his royal existence more comfortable.

He never speaks of the previous part of his life; nevertheless, by drawing his attention to it, and keeping it fixed, as it were, on that point, some part of his history may be obtained.

He was born at Coulommiers; at fifteen he was bound to a tailor, but he gave up that employment for that of a cook, and soon afterwards he became a soldier. He does not know how old he was when he married; he intended to marry his two daughters, and then one of them only, as he was given to understand that polygamy is punished by death. He afterwards married the daughter of Charles X. We give here a copy of the letter he received from the princess. "Louis Pierre Francois Manche Isidore, I love you as my eyes, and my father, the King of France, also loves you; come and constitute my happiness, as I shall be your's, at Clichy, our first rendezvous." And Manche employed ten thousand deer, galloping like the devil, in order to arrive at Clichy, after having traversed ten thousand leagues, and nevertheless, according to him, Clichy was only half a league distant.

His wife is a sempstress; he frankly acknowledges it when questioned on the subject.

Manche was asked how many children he had, and he replied at first seventeen; but when afterwards questioned as to how many boys and girls, he said two boys and two girls. Returning then to his riches and honours, he remarked that one fine day, no later than yesterday, he called upon his father-in-law, Charles X., and said, "by the bye, sir, you have given me your daughter, but when shall I have her dowry?" "You are quite right,"

replied the king, and immediately showered dignities, decorations, millions, &c., on him.

Manche died lately, and the appearances after death were as follows.

The cranium was remarkably thin; the cerebrum did not fully distend the dura mater; its anterior part had fallen into folds. The arachnoid contained about an ounce of sanguinolent serum, and this membrane, as well as the pia mater, appeared to be thickened; they are of an opaque white colour; these membranes were very adherent to the cerebrum, especially near the Pacchionian glands, so that, when they were separated, portions of the brain were torn away with them. The cerebrum has undergone softening, but the medullary portion has suffered the least. The lateral ventricles are of their ordinary size, and contain about an ounce of serum. The thalamus opticus and corpus striatum of the left side are normal; on the right there appears to be the remains of an apoplectic deposit in the right thalamus, and all around, the cerebral mass is considerably softened; the tuber annulare and cerebellum are healthy.—*M. Ferrus's Clinical Lectures on Mania.*

Selection from Parisian Clinical Lectures.

CLINIC OF M. DELMAS AT THE HÔPITAL
DE LA CHARITÉ.

Malignant Typhoidal Fever cured by Tonics and Excitants preceded by Local and General Blood-letting.

BY M. B. CHOMETTE.

Julian, a young unmarried man, 22 years of age, a roaster of onions by trade, living, or rather half starving, upon roots and cheese, and subject, from his grade and vocation, to every change of temperature, feeling himself exceedingly indisposed, especially in the head, entered the hospital Jan. 23rd.

He is of spare habit, rather narrow-chested; never was ill before, and then complained only of intense cephalalgia and general indisposition; face red; skin dry and hot; pulse frequent; no abdominal pain or diarrhœa; no derangement of the respiratory organs; neither languor nor stupor.—Repose and diet.

For a few succeeding days the cephalalgia increased and the face became redder, but the malady did not yet take a malignant character. One bleeding in some degree relieved the head, but the blood presented no inflammatory film, and nothing remarkable in its coagulum. Twenty leeches to the anus.

28th. No change except inflammatory symptoms more strongly pronounced.

31st. At length the malady was characterised by anorexia and cephalalgia; sharp and vague pains about the abdomen, much increased by pressure. The abdominal cavity much distended, and from percussion emits a clear sound; tongue red, dry, and pointed; abundant diarrhœa; stools yellowish and liquid;

a cough, with expectoration, thick, viscid, and adhering to the bottom of the vessel; respiration but little embarrassed, the air entering the pulmonary vesicles tolerably well.—Gum-water. Clyster if the bowels are not open within a few hours. Eighteen leeches to the anus; broth.

The few first days of February the eyes were fixed in their orbits; state of singular depression and stupor. If raised up he fell back with a dead weight; if spoken to, answered slowly and with difficulty.

6th. Pulse soft and frequent; skin hot and dry; thirst excessive; no appetite; breath foetid; lips and teeth covered with a black adherent coating; tongue dry, red, but clean, and wiry to the touch; abdominal pain very little increased by pressure; four liquid stools; abundant vomiting, leaving bitterness in the mouth; cough not augmented, but the expectoration thick, and streaked with red and scarlet blood. Being asked whether he had bled at the nose, he answered no; nevertheless congealed blood was in the nostrils. Epistaxis had therefore taken place, and the blood had flowed into the throat through the posterior opening of the nasal fossa; respiration neither short nor precipitate; not distinguishable, however, near him; the ear applied on the thoracic cavity detected much sibilous and mucous rattle, more particularly over the posterior region; no sign from percussion; depression still greater; when raised up, fell back with dizziness of the eyes.—Gum water, diet, lavement.

7th. The expectoration still streaked with blood; six or eight stools; the thoracic and abdominal walls here and there were covered with red spots, but not yet of a petechial character.—Same treatment.

8th. The lips and teeth have lost their black covering; five stools; pulse only frequent; expectoration simply thick and viscid.—Same treatment.

9th. Abdomen no longer painful even on pressure; tongue slightly moist; two stools. Gum water; two simple clysters in the twenty-four hours; broth.

10th, 11th. Nothing new.

12th. The morbid sounds in the chest still continue; cough not augmented, but the expectoration more abundant, and the colour like the juice of prunes; rest of the symptoms very nearly the same.—Blister on one side of the chest; decoction of quinquina; foot bath.

13th. Cephalalgia less intense, yet the features sunk, nose and ears red and tumefied; erysipelas spreading about the upper part of the face; expectoration sometimes red and viscid, sometimes purulent; abundant suppuration of the blister.—Gum water; decoction of quinquina; chloride lotion; drink, syrup of æther and half a drachm of acetate of ammonia. Another blister to be applied on the other side of the chest.

14th, 15th. Nothing remarkable; erysi-

pelas not increased; pain in the ears.—Same treatment.

16th. Sweat for the first time, and abundantly, from the sterno-cleido-mastoidals to the anterior and inferior of the neck; pulse frequent, but full; tongue still red, but not moist; an abundant yellow liquid flows from the ears.—The ammonia was suspended; gum water; decoction of quinquina.

17th. Erysipelas disappeared; sweats still copious; delirium during nervous excitation; no stools; suppuration of the ears continues, and hearing obtuse. The decoction of quinquina suspended; clysters to be repeated.

18th. General state good; tongue red, clean, and moist; no stools; expectoration only mucous; respiration tolerable; the blisters dressed with simple cerate only, suppurred abundantly; on the os sacrum a small gangrenous eschar.—Same treatment.

23rd. Tongue large and humid; sadness and depression less marked still continue; an epistaxis abundant.—Gum water; decoction of quinquina; broth.

24th. Convalescing sensibly; expression of stupor gone; the sore of the sacrum cicatrising; epistaxis has not re-appeared.—Same treatment.

25th. Good tongue; expectoration mucous but not abundant; air reaches the lungs freely; no rale; no cephalalgia; pulse full, but not frequent, appetite returned.—Ordered soup and beef-tea.

The symptoms continued to decrease daily, and on the 20th March the patient was ready to quit the hospital, feeling no remains of his malady but a slight deafness.

HÔTEL DIEU.

New Species of Encephalocoele, never yet described.

OBSERVATION AT THE CLINIC OF DUPUYTREN.

THERE is a species of *Encephalocoele*, of which medical writers have as yet given us no description, at least as far as I know; the ambiguity of its diagnostic may perhaps be the reason:—but to the point.

Towards the beginning of 1833, an infant of eighteen or twenty months old, of good constitution and in good health, was, with its mother, received into the Hôtel-Dieu for the cure of a wen about the size of a nut, situated at the root of the nose, exactly below the nasal spine of the os frontis. It had every appearance of a small cyst; was moveable at its base without change of colour to the skin; not pulsatile; indolorous, resisting pressure, and somewhat like a little horn. The skin of both lachrymal sacs was slightly raised, and the nose very much flattened; in short, from its appearance, it was at first considered as a simple encysted tumour, such as is not unfrequently found in the same region, and an operation was judged necessary.

But, on questioning the mother, it appeared that this tumour had existed from the hour of

the child's birth; that at first it was about the size of a pea, had increased by insensible degrees, and always appeared swelled and rather discoloured when the child cried; and, finally, that some country surgeon had advised the cure of it by caustics. It may not be irrelevant to add, that the disposition of the child was in a remarkable degree irascible; a circumstance which has characterised every case of encephalic hernia, whether congenital or accidental, that ever came within my observation. In no other respect was the child remarkable.

From all circumstances, then, M. Dupuytren suspected that this tumour was a proloungation of the brain through some congenital cleft in the base of the skull; yet it was neither reducible in size, nor pulsatile, though a strong pressure of it by the finger gave pain and general agitation, but no remarkable encephalic symptoms. On displacing the base of the bone, a certain unusual rugosity was felt on the margin of the upper bones of the nose, but no osseous opening could be readily traced, nor was that surprising, as in many cases of encephalic hernia, the progress of ossification will reduce the hole of communication to extreme smallness.—Camper, Ruysch, Astley Cooper, Nannula.

Aware that M. Breschet, as surgeon of the Hospice des Enfants Trouvés, had many times dissected the bodies of children, M. Dupuytren anxiously sought his opinion on the case.

M. Breschet declared that he had himself met with a case exactly similar; that autopsy had proved the tumour was formed by a portion of one of the anterior lobes of the brain prolonging itself through a central cleft of the ethmoid and spheroid bones to the root of the nose. A design had been taken of the case, which he exhibited, and it was the exact counterpart of the one in question.

The mother of the child was of course forbidden ever to suffer any operation to be performed on the tumour, a slightly compressive but continued bandage being all that was necessary, and which might by possibility reduce it in time.

Congenital encephalocele had already been observed in several parts of the skull; but I was not before aware of the possibility of the formation of these tumours through a cleft of the base of the skull to the root of the nose. These herniæ, then, from their deceiving appearance, demand the greater attention from the practitioner, as a sanguinolent or caustic operation on them might prove fatal.

Professor Lallement, of Paris, it is well known, believing that he was operating on a small wen in the nape of the neck of a young lady, found on dissection that it was a proloungation of the cerebellum through an opening of the occipital bone. The young lady died.

About the same time another case of apparent wen appeared in one of the hospitals, and the surgeons were about to operate upon it, when the young lady's fate opened

their eyes, and they desisted. I myself saw another instance in 1827; it was in the Hospital of Incurables at Naples; the tumour was on the temple, near the corner of the eyebrow, and had every appearance of a wen.

It would appear, from several facts verified by dissection, that congenital encephalocele may arise not only in the sutural region of the skull, but also about its anterior part.

It is necessary to add, that in aid of this malady I have invented a little concave compressive shield of caoutchouc, which can be adjusted to every form, size, and region of the tumour. By means of this instrument, which is fastened on with a ribbon, a very gentle but sufficient compression may be continued on the tumour. Its advantages I took occasion to illustrate some days ago in my public ophthalmic lectures, by several examples of individuals with inoperable tumours in the region of the eye, by whom it is used.

But I must not close this observation without some notice of M. Velpeau's last reply. In the *Gazette des Hôpitaux* of 28th March, he does me the honour to reply to me through the medium of Dr. Berigny, that, before the publication of my Memoir on the chronic crackling swelling of the fore arm, he was already acquainted with the malady in question, &c.

I rejoice in having forced M. Velpeau to tear away the veil which covered the question. It is very evident from the passages reported by Dr. Berigny, and the two memoirs which I had cited, that M. Velpeau was altogether very much in error, when he lately assured the "Society of Emulation" that no one had spoken of that malady before the communication which he was then about to make before that learned body. This is precisely the error with which I would combat; and the note of Dr. Berigny another:—he attributes to M. Velpeau the idea of making patients afflicted with intra-capsular fracture of the neck of the thigh walk as soon as possible. The gentlemen are both totally mistaken, for the merit of the matter rests solely with Sir Astley Cooper; he it was who first suggested the idea, as may be seen in his admirable work "On Dislocations and Fractures of the Joints," written more than ten years ago. Besides, M. Velpeau cannot have forgotten that the idea which he thus appropriates to himself was discussed by me two years ago, in a work published in Paris—"Memoire sur les Fractures du Femur, Trans. Med. March, 1833."

MEDICAL CLINIC OF M. CHOMEL.

Pleuro-pneumonia of the Right Side, with Icterus and Bilious Vomitings—general and local Blood-letting—Cutaneous Revulsives—Cure.

IN the Hall of Saint Lazare lies a female cook, aged 56, of strong constitution, indisposed only a few days before her admission; at first with sharp pains in the right side, succeeding a shivering fit, accompanied by cough and

dyspnœa: to these symptoms diarrhœa and bilious vomitings quickly succeeded; blood-letting in the arm twice, and twelve leeches to the epigastrium proving of little effect, she was brought to the Hôtel Dieu, and we found her thus:—face and sclerotic of yellow hue, cheek-bone only tipped with red; diarrhœa and bilious vomitings still continuing; great pain in the epigastrium and right flank; pulse 100; respirations 36 in a minute; cough, with expectoration, insignificant in quality.

This assemblage of symptoms naturally led to the suspicion of hepatitis; but, as M. Chomel observed, phlegmasia of the liver is a rare malady in our climate; scarcely do two cases of the kind occur throughout the clinic of a year, whilst pulmonary phlegmasia is extremely frequent. True, it is said that pneumonia of the right side frequently becomes mixed with hepatitis, so much so indeed, that many authors have given it the name of *gastro-hepatic pneumonia*; but in this case, as in many others, a simple functional disorder of an organ has been mistaken for a phlegmasic state. In inflammation of the right lung, the liver is sympathetically affected, in the same manner as in inflammation of the veins, the bladder, and the uterus. We find sympathetic vomitings from the stomach, but we do not therefore find phlogosis of the stomach. The autopsy of several cases of pneumonia with jaundice has never discovered to me any appreciable alteration in the liver." And M. Chomel was right.

Auscultation and percussion of the thorax gave, from three-fourths of the posterior of the right lung, a pure dry crepitation, with slight hoarseness of the voice, accompanied with bronchial respiration.

As the vomiting had afforded the patient no relief, M. Chomel did not think it right to administer an emetic, though a medication hitherto so much vaunted in cases of the kind, but applied a large blister to the side affected.

Two days afterwards the pain in the side had disappeared, the general weakness and depression were less marked, and the expression of the countenance more natural. Pulse 80; respiration kept at 36 per minute. This discrepancy between the respiration and the circulation was additional confirmation of the belief that the malady was in the chest. Expectoration always the same.

On the 28th of March, being the sixth day of the patient's admission into the hospital, the general symptoms of the malady had entirely disappeared. Auscultation still gave a loud sonorous râle arising from engorgement of the pulmonary tissue by a certain quantity of liquid. This M. Chomel considers a state between health and sickness—between the normal and pneumonic state of the lung, and like all the other phenomena, sometimes manifested after and during the resolution of pneumonia, highly deserving the attention of the student.

Cancer of the Liver—Jaundice and Acute Dropsy—Cancerous Masses developed in several of the Thoracic and Abdominal Organs.

A man, 68 years of age, originally of robust constitution, was admitted into the Hôtel Dieu, two years ago, for dropsy. The malady yielded to blood-letting and purgatives, and he quitted the hospital at the end of a fortnight cured.

In the month of February last the dropsy reappeared; the œdema began with the feet, and proceeded gradually up the lower members, the abdomen becoming speedily of considerable size. Such had been his state for about three weeks, when he was again admitted into the hospital. The symptoms on the following day were—œdema of the inferior extremities; considerable tumefaction of the abdomen, which evidently fluctuated; the tension of its coats preventing the exploration of the visceral contents; skin, and especially the sclerotic, of a deep jaundice colour; no great thirst; inappetence; stools not very copious, soft, and whitish; urine very scanty and of a deep red; respiration accelerated.

By auscultation, a slight sonorous crepitating râle was detected, particularly about the inferior part of the left lung. Action of the heart irregular, beats of an intermitting character; pulse 120, with no *intermittence*, but no cephalalgia, or sensation of suffocation; intellects clear and composed. Twenty leeches to the anus. Beverage, couch-grass nitred, and mixed with water.

Occasional frictions of the abdomen with mercurial ointment afforded no relief; the anasarca increased; the face infiltrated, intense dyspnœa supervened, and he died.

Autopsy.—The liver, of great bulk and of a greenish hue, was covered with cancerous masses of various sizes and in different states, easily detached; some of a dull-white and firm consistence grated under the scalpel; others, beginning to soften, had passed from the scirrhous to the encephaloid state; several other of the abdominal viscera had these cancerous masses; a great number occupied the excavation of the pelvis; two inches above the lower extremity of the rectum was a cancerous mass of considerable bulk. Lung much contracted, particularly its posterior portion, by the liquid contained in the cavities of the pleuræ. The mediastinum enclosed several of these cancerous masses. The heart was moderately hypertrophied. The brain presented nothing remarkable.

Dysentery — Administration of Narcotic Lavement—Perforation of the Rectum—Death—Numerous Abscesses in the Excavation of the Pelvis.

We have assisted at the opening of the body of a man in the prime of life, who entered the hospital for a dysenteric affection. The rectum had been perforated about an

inch above its anal extremity by the canula of a syringe used in administering a lavement. The consequence of this perforation was a purulent infiltration of the cellular tissue of the pelvis; in some points the pus was collected. A fact analogous to this had already been observed by M. Chomel at La Charité.

British Hospital Report.

WESTMINSTER HOSPITAL.

Fracture of the Humerus from Muscular Action.

JAMES MERRITT, æt. 34, a shoemaker by trade, residing in Marsham-street, Westminster, was admitted into this hospital, and placed in Luke's Ward, Oct. 29, 1834, under the care of Mr. Guthrie. He is a stout, athletic man, rather above the middle height, accustomed to great exercise, more especially hurling great weights. He has frequently thrown stones to a considerable distance for a wager, and has at different times displayed considerable muscular power in raising heavy weights. He states that he has lifted five half-hundred weights at once, and that he has thrown a stone the distance of one hundred and forty-four yards. He has made more money by his personal strength than by application to his trade. His person corresponds with the account he gives of himself, being marked by great strength, power, and muscularity.

On the day of his admission he was engaged for a wager to throw a stone weighing about two ounces to the distance of one hundred yards, in doing which, the powerful action to which the muscles were excited caused the humerus to snap across just below the insertion of the deltoid. At the time the accident happened he himself was not aware of it, but soon became sensible of it by the severe pain which supervened, and the want of power in the limb. The snap was audible to the bystanders. He was seen soon afterwards by Mr. Pearse, of Marsham-street, who sent him into the hospital, where splints and a roller were applied, and the usual treatment adopted. Considerable inflammation and tumefaction ensued, and it became necessary to remove the bandage and the remainder of the apparatus. The whole arm became very much swelled, and presented the appearance of erysipelas phlegmonodes, with very severe pain and high-inflamed fever. Leeches were applied freely, followed by cold lotions; purgatives were administered, and he was kept on low diet and perfectly at rest. The cold lotion was afterwards exchanged for fomentations in the daytime and poultices at night. On the 1st of November the limb presented indications of fluctuation, and Mr. Guthrie was consequently induced to make an incision near the elbow, but blood only was evacuated. The inflammatory symptoms and the fever

gradually diminished, and by the fifteenth of the month, when he was removed to the new hospital, the tumefaction had lessened so much, that the splints were reapplied.

The splints and bandage were kept applied until the 7th of December, when union was found to have taken place, and was firm. The apparatus was accordingly removed. On the 16th he left the hospital: at that time union was perfect, and the abnormal size of the limb was removed, but there still remained some enlargement at the lower extremity of the limb, and he was unable to use it. He could not even use his fingers, and was therefore totally unfitted for his usual occupation—that of a shoemaker. He was recommended to have recourse to friction, more especially about the lower part of the arm and the upper part of the fore-arm, and also to use passive motion several times in the day. Hope of recovery animated him, and he had due recourse to these measures, but unfortunately without benefit. The last time we saw him he remained *estropié*.

EXAMINATION OF THE EDINBURGH VETERINARY SCHOOL.

THE Annual Examination of the Veterinary School, conducted by Mr. Dick, under the patronage of the Highland and Agricultural Society of Scotland, took place in the Lecture Rooms, Clyde-street, on the 23rd and 24th April, when the following students, who had completed the prescribed course of study, were, after examination, found qualified, and obtained diplomas:—James White, Paxton, Berwickshire; Robert Mason, North Berwick, Haddington; John Tait, Tweedmouth, Northumberland; Henry Seaton, Edinburgh; James Horsburgh, Castletown, Mid-Lothian; William Anderson, Lanark; Peter Strut, Coldstream, Berwickshire; John Pattison St. Clair, Morpeth; John Donaldson, Paisley; Andrew Edmonstone, Aberargie, Perthshire; Alexander Waddell, Guildtown, Perthshire; James Maxwell, Dalswinton, Dumfries; John Falconer, Loanhead, Mid-Lothian; and John Aldington Ainslie, London.

The proficiency shown by the students in the several branches of Medical Science, and especially in that department more immediately the object of their pursuit, afforded much satisfaction to all who witnessed the examination. Each student, before being admitted on trial, is required to attend a course of two years' study under Mr. Dick, and during which period, by the very liberal conduct of several of the most distinguished medical professors and lecturers in the city, they have the benefit of free admission to their respective classes. As upon former occasions, the Convener and Committee appointed by the Society superintended the examinations, which were conducted by Professors Sir George Ballingall, Graham, and

Lizars, and Drs. Gillespie, Wm. Wood, Mackintosh, Robertson, and Aikin, and Mr. J. G. M. Burt, surgeon, and by Messrs. Gray and Henderson, veterinary surgeons, Edinburgh.

At the close of the business the Convener shortly addressed the students, and congratulated them on the favourable termination of their studies. They had all acquitted themselves well, and to four who had more particularly distinguished themselves premiums had been awarded. The convener, in conclusion, earnestly entreated the students to endeavour, under an humble trust in Divine assistance, by a correct deportment in their future lives and conduct, to prove themselves worthy of the advantages of the liberal education which they had enjoyed. He assured them, that as it was the only return which they had it in their power to make to those generous medical friends to whose liberality they were so much indebted, he was satisfied their future good conduct and success in life would be the most gratifying remuneration which these gentlemen could receive.

To the medical gentlemen, to whose kind assistance the School was so much indebted for its success, he begged, in the name of the Committee, and of the Highland and Agricultural Society of Scotland, to return his best thanks; and he was certain, all who felt interested in the Institution would agree with him in expressing their satisfaction of the manner in which Mr. Dick continued to discharge the duties of his situation.

Sir George Ballingall then expressed to the students the high satisfaction with which he and the other medical gentlemen present had witnessed the appearance made by them on their examination, and enforced the advice given them by the Convener as to the care they ought to take to exhibit propriety of conduct in their future lives.

Mr. Dick then returned his thanks to the medical gentlemen who had attended the examinations, and in a particular manner to those who furnished his pupils with free admission to their lectures. Without this great advantage, he found he could not by any exertions of his own have produced pupils who did so much credit to the schools as those now examined.

NORTHAMPTON LUNATIC ASYLUM.

THE meeting, adjourned from October last, to promote the erection of a General Lunatic Asylum for the county, was held at the *George Hotel*, in this town, on Wednesday the 22nd, Earl Spencer in the Chair. The company present included Earl Fitzwilliam, Sir Wm. Wake, Bart., Rev. Sir G. Robinson, Bart, Hon. and Rev. Sir T. L. Dundas, Rev. Geo. Butler, D. D., Rev. Geo. Hanbury, Rev. M. Lightfoot, Rev. T. W. Barlow, E. Bouverie, Esq., and many other gentlemen. The minutes of the last meeting having been read, a state-

ment was made of the monies subscribed. The total subscriptions amounted to 14,684*l.*, of which 2900*l.* had been expended for land, leaving an available surplus of 11,784*l.* Of this sum 2114*l.* is subscribed conditionally on the early commencement of the building.

The meeting, after some observations relative to the probable expence of erecting the asylum, passed resolutions for the adoption of measures to commence the building without further delay. A special Committee was accordingly appointed, whose meetings any subscriber may attend; and some other resolutions of minor importance having been proposed, the meeting adjourned.

ROYAL COLLEGE OF SURGEONS.

NAMES of Candidates who received Diplomas during the month of April, 1835.—Henry H. Parkin, Woolwich; Thomas Cocks, Hatfield, Broad Oak, Essex; Thomas Ebbage, Bungay, Suffolk; Joshua Ingham Ikin, Huddersfield; William Crozer, Newcastle-upon-Tyne; Samuel Legh, Hordley, Salop; George V. Ellis, Minsterworth, Gloucestershire; Wintour Harris, Bristol; Thomas Davis, Chester; John H. Roberts, Finsbury Circus; Hannam S. Thompson, Dover; John Francis, Westerham; Charles R. B. Jolly, Devonport; William R. Dalton, Ipswich; Edward Bradley, Liverpool; James Wilks, Birmingham; Richard Roe, Manchester; William Hurle, London; C. E. Cutcliffe, South Moulton; C. Brewster, Tolleshunt, D'Arcy; Henry L. Lopwith, Tunbridge Well; Thomas Taunton, Worcester; Thomas Middleton, Salford; Edward Watson, Manchester; Wm. Yorke Jones, Denbigh; Melville Neale, A.; Edward Furlley, Canterbury; Wm. Hallett, Down House, Gloucestershire; Christopher Dermott, Cotehill, Cavan; John Cockle, Lambeth-street; W. R. Bartleman Hawes, London; Joseph Nikson Haslam, Market Drayton; Thomas G. M. Hare, Horsham; John Pallen, New Brunswick, British America; William Lambton, E. I.; H. L. Prichard Morgan, Glamorganshire; M. T. Coleman, London; W. P. Bennett, Foy, Cornwall; James Le Gros, Salisbury; J. F. Harding, Spencer-street, Northampton; George A. Michell, Redruth; F. T. B. Street, E. I.; George Newport, Canterbury; P. E. Chadwick, Long Aston, near Bristol; Hugh P. Fuller, London; Mr. Lambton, Brompton.

APOTHECARIES' HALL.

NAMES of Gentlemen to whom the Court of Examiners granted Certificates of Qualification, Thursday, April 23rd, 1835.—George Thomas Adams, Wallsall; Thomas Taunton, Worcester; Francis Slaughter Rogers, Westmeon, Hants; Joseph Willis, Clapham, Yorkshire; Henry Shore, Sheffield; George Tait, Staffordshire.

We understand that it is in contemplation by the Governors of Middlesex Hospital to hold a meeting at an early day, to take into consideration a proposition, upon the recommendation of a special committee, for establishing, by means of additional buildings or otherwise, as may be determined on, a school of medicine. The school is to be in connexion with the hospital, and under the control of its governors.

APPOINTMENTS.

Naval.—Mr. Peter Suctor, surgeon to the Manages convict ship, which sailed last week from Portsmouth with three hundred convicts for Van Diemen's Land. Mr. Wm. Donnelly, M.D., surgeon to the Astræa.

Military.—Assistant Surgeon J. Munro, M.D., from the 7th Foot, to be assistant-surgeon to the 6th Dragoon Guards, vice Foster, promoted. Hospital Staff—Surgeon George Mann, from the half-pay of the 93rd Foot, to be surgeon to the Forces, vice Henry Franklin, who retires. Assistant-Surgeon John Foster, M.D., from the 5th Dragoon Guards, to be surgeon to the Forces. To be Assistant-Surgeons to the Forces—John Sinclair, vice Blakeney, appointed to the 67th Foot, and John Watkins, vice Robert Bell, who retires.

General.—Mr. Brydone, surgeon to the Burrill, the Petworth emigration ship to Canada. Mr. Charles Goodwin, apothecary to the Norfolk and Norwich Hospital. Mr. Barker, surgeon to the Rochdale Dispensary. Mr. Edwin Skeate, house-surgeon and apothecary to the Bath General Hospital.

DEATHS.

Dr. David Moorhead, of Killinchy, Co. Down, Ireland. Mr. Robert Hook, surgeon, of Yarmouth, Mr. Henry Wilson Roxby, of Leeds, surgeon.

WEEKLY BILL OF MORTALITY.

London, Tuesday, April 28, 1855.

Abscess	2	Inflammation	39
Age and Debility	58	Inflammation of the	12
Apoplexy	9	Bowels & Stomach	12
Asthma	13	Inflammation of the	8
Cancer	1	Brain	8
Childbirth	15	Inflammation of the	12
Consumption	108	Lungs and Pleura	12
Convulsions	41	Insanity	2
Croup	4	Jaundice	3
Dentition, or Teeth-	22	Liver, Diseased	7
ing	22	Measles	31
Diabetes	3	Mortification	10
Dropsy	17	Paralysis	8
Dropsy on the Brain	21	Rheumatism	4
Dropsy on the Chest	2	Scrofula	1
Epilepsy	4	Small Pox	20
Fever	26	Sore Throat & Quinsey	1
Fever, Scarlet	9	Spasms	4
Fever, Typhus	5	Stone and Gravel	1
Gout	3	Thrush	3
Heart, Diseased	14	Tumour	1
Hernia	1	Unknown Causes	23
Hooping-Cough	25		
Indigestion	4	Stillborn	41

Buried, Males 330 Females 321 Total 651
Increase in Burials reported this week, 332.

METROLOGICAL JOURNAL FOR APRIL.

Days of Month.	Moon.	Thermom.			Barometer.		De Linc's Hygrometer.		Winds.		Atmospheric Variations		
		53	62	52	29.71	29.70	61	51	S.S.W.	S.S.E.	Fine	Fine	Fine
1		53	62	52	29.71	29.70	61	51	S.S.W.	S.S.E.	Fine	Fine	Fine
2		54	65	54	29.63	29.51	51	50	S.S.E.	S.S.E.	Foggy	---	---
3		56	61	49	29.51	29.51	51	52	S.W.	S.W.	Fine	---	---
4		44	53	47	29.84	29.91	53	62	W.N.W.	S.S.W.	Rain	Rain	Rain
5		42	49	41	29.97	29.98	62	60	E.	E.	---	---	---
6	F Q	48	51	43	30.01	30.11	60	55	E.	E.S.E.	Fine	Fine	Fine
7		44	59	44	30.14	30.14	55	50	S.E.	S.S.E.	---	---	---
8		52	63	49	30.07	30.00	50	59	S.S.W.	W.	---	---	---
9		51	59	43	29.94	29.96	59	48	S.W.	N.N.W.	---	---	---
10		43	54	40	30.08	30.13	48	48	N.N.E.	N.N.E.	---	---	---
11		58	60	50	29.97	30.16	48	50	N.E.	N.E.	---	---	---
12		48	52	40	30.06	30.13	50	49	N.W.	N.	---	---	---
13	FM	58	59	48	29.97	29.67	49	46	N.W.	S.W.	---	---	---
14		51	60	46	29.73	29.80	47	44	S.W.	S.S.W.	---	---	---
15		40	48	35	29.70	29.72	41	47	S.W.	S.S.E.	---	---	---
16		36	47	30	29.93	29.87	47	46	N.W.	N.	---	Snow	Snow
17		39	45	36	29.92	29.90	46	47	N.N.W.	N.W.	---	---	Cloudy
18		40	50	38	29.83	29.71	47	49	W.	W.	---	Rain	Rain
19	L Q	46	52	45	30.01	30.15	49	47	N.W.	N.W.	---	Fine	Fine
20		50	58	48	30.20	30.19	47	48	W.	N.W.	---	---	---
21		53	58	48	30.20	30.16	46	48	W S.W.	W.	---	---	---
22		50	59	47	30.15	30.16	48	46	W.	W.	Rain	---	---
23		55	57	50	30.20	30.17	46	48	N.N.W.	N.N.W.	Fine	---	---
24		52	59	43	36.12	30.12	48	49	N.W.	N.W.	Cloudy	---	---
25		50	54	41	29.90	29.64	49	47	W.	W.S.W.	Fine	---	---
26		44	49	36	29.56	29.54	47	48	N.W.	W.N.W.	Cloudy	Snow	---
27	NM	40	49	35	29.38	29.47	48	47	N.	N.E.	Fine	Fine	---
28		45	52	41	28.56	29.62	48	56	N.E.	N.E.	---	---	---
29		44	48	42	29.43	29.46	56	67	N.E.	N.N.E.	Rain	Rain	Rain
30		45	48	43	29.23	29.34	66	67	N.N.E.	S.W.	---	---	Showry

The quantity of rain fallen in April was 96-100 of an inch.

50, High Holborn.

WILLIAM HARRIS and Co.

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CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE X.

On Bed Sores in Fever, and their Treatment—Instances of Fever spreading by Contagion—Attacking a Person whose mouth was affected by Mercury—Observations on the use of Tartar Emetic in Fever—An account of the manner in which it is usually employed—New views upon this subject—Practice first introduced by Dr. Graves of giving Tartar Emetic combined with Opium in the advanced stages of Fever—Successful cases—Treatment of Fever with Profuse Sweating in the commencement—Mr. Cookson's case—Mr. Stephenson's case—Mr. Knott's case.

GENTLEMEN,—I beg leave to draw your attention to-day to some points connected with the treatment of fever. The number of fever cases we have had of late, is much greater than for some years; and to those who are anxious to acquire a knowledge of the phenomena and character of one of the most interesting and important of human maladies, our wards furnish at present very ample opportunities. I trust every gentleman who listens to me will avail himself of such advantages, and not permit opportunities of acquiring valuable information to pass away unprofitably. It is my duty to speak of the particular modes of treatment adapted to fever cases, to inform you how each symptom may be most successfully combated, and to lay down rules for your guidance in each particular emergency; it will be your business to collect and arrange the detached materials, and form your general principles with respect to the management of this very important disease. It has never been my wish to speak generally of the nature or treatment of fever; time will not permit me, nor do I wish to encroach on the province of

those who lecture on the practice of physic; my object is merely to note symptoms as they rise, to speak of their nature and treatment, to confine myself to detached observations, and, as far as lies in my power, to contribute facts to those who write or lecture on practical medicine.

A woman has been admitted lately, who had been labouring under fever for a considerable time before she came into the hospital. This poor creature seems to have been in very miserable circumstances during her illness; her bedding must have been totally neglected, and no attention paid to cleanliness, for on her admission, though nearly free from fever, she was covered with bed sores to a frightful extent. Almost every point which had been subjected to pressure had ulcerated, and the ulcers went on undermining the skin, and committing terrible devastation in the cellular substance. Cases like this require great care and unremitting attention; it is on the exercise of an active and untiring humanity that the cure will mainly depend. In the first place, you are to recollect that the efforts of the constitution towards the re-establishment of health are impeded by the irritation of the sores; sleep is prevented, and the patient kept in a state of continual suffering, while a constant drain from the system is kept up by the ulcerative discharge, adding to the amount of existing debility. Hence a pseudo-febrile state arises, characterised by quick pulse, restlessness, and want of sleep, somewhat akin to that which is produced by scrofulous irritation. The appearance, however, of general excitement of the system, should never prevent the physician from adopting every mode of strengthening the patient as much as possible. You will not succeed in removing this condition by an antiphlogistic regimen; the patient requires tonics and narcotics, with a nutritious but not stimulating diet. If you put him on a low regimen, and give antifebrile medicines, you will do mischief; you will increase the existing debility, and add to the source of febrile excitement. Your practice should be to prescribe a nutritious diet, wine, and the sulphate of quinine, and to treat the sores with stimulant applications. The local application

which we found most beneficial in such cases is one composed of two ounces of castor oil, and one of balsam of Peru, which is to be applied on pledgets of lint, and covered with a poultice of linseed meal two or three times a day. In addition to this, we direct the sores to be washed night and morning with a solution of chloride of soda, in the proportion of twenty or thirty drops of the saturated solution to an ounce of water. We also direct the patient to lie occasionally on her face, and enforce the strictest attention to cleanliness on the part of the nurse. Dr. Arnott's hydrostatic bed is an excellent adjuvant in the treatment of this disease, but unfortunately the one we have is at present out of order.

Such then, gentlemen, is our mode of treatment. We order the patient nourishing, but not heating, food; we give wine, regulating its quantity according to its effects on the system, and the liking of the patient; we prescribe small doses of the sulphate of quinine, and administer an opiate at night to allay irritability, and procure sleep. The local treatment consists in the use of stimulant and detergent applications, poultices, attention to cleanliness, and change of position.

With respect to the present epidemic fever, we have now seen so many instances of its direct communication from one patient to another in our wards, that we are induced to believe it to be contagious. From the great number of applicants labouring under serious and threatening diseases, we are sometimes obliged to put into our fever wards, patients affected with local inflammations accompanied by symptomatic inflammatory fever; several of these, while recovering, have been attacked with symptoms of the present epidemic. A man was admitted last week into the fever ward with violent pneumonia; the right lung was extensively hepatised, and in addition to this, the pleura was found to be engorged over a large portion of its surface. The case was one of extreme distress, and the state of the patient apparently hopeless; however, by appropriate depletion, assisted by mercury and blisters, convalescence became established, and the pulmonary symptoms were rapidly subsiding. His system was still under the influence of mercury, his fever had disappeared, his dyspnoea was relieved, his cough and all the other symptoms nearly gone, when he was suddenly attacked with fever, and that of the same character as prevailed among the patients in the same ward. This is, I believe, the sixth or seventh case, in which patients labouring under some other form of disease, have been seized with symptoms of the present epidemic, while lying in the same ward with fever patients. I have thought it necessary to make this observation, because you will find it asserted in medical works and by physicians of considerable eminence, that in hospitals fever does not spread from one patient to another, and that where it does appear among many individuals in the same

house, its spread is chiefly favoured by want of cleanliness and proper ventilation. This, however, we can state to be the fact, that fever will spread among patients in the same ward, independent of anything connected with filth or foul air, for we have seen it occur in our wards, which I can assert are kept as clean and as well ventilated as any in the kingdom.

There is one circumstance connected with this case worthy of remark with reference to the supposed antifebrile properties of mercury. It has been stated that mercury exercises a prophylactic influence over the system, and several persons who have cultivated medicine with success, but particularly some army surgeons of high authority, have asserted that the use of mercury not only cures fever, but also secures against it. I am afraid that in this and other cases mercury has more credit than it deserves. In speaking of cholera on a former occasion, I have told you that I had seen persons under the influence of mercury take cholera and die of it; and here we find a man whose mouth is still sore, in whom salivation had not ceased, getting an attack of fever at a time when he had just recovered from another disease. This shows that mercury is not to be looked upon as a prophylactic in cases of fever of a contagious nature. We cannot always cure or prevent fever with mercury; on the contrary, where fever of a particular kind is present, it prevents the constitution from yielding to its influence. Thus in a case of hectic fever, brought on by sup-puration of the liver, it has been found impossible to bring the system under the influence of mercury.

I come now, gentlemen, to speak of a matter of great importance in the treatment of fever, — I allude to the indications for exhibiting and the mode of giving tartar emetic at different periods of the continued fever of this country. For some time I have been in the habit of employing tartar emetic with very remarkable success at various periods of fever, but principally towards its termination. I am therefore anxious to lay before you a brief statement of my experience of this admirable remedy, and I shall take leave to illustrate this by a reference to several very remarkable cases in which its administration was followed by the most decided and satisfactory results.

You are all aware that tartar emetic has been long and justly valued by the profession for its manifold and energetic properties. Without referring to its importance in the treatment of pulmonary diseases, and almost every form of local inflammation, I may observe, with respect to our present subject, that tartar emetic in small portions, dissolved in a quantity of whey or water, has been for a considerable time a popular and successful remedy in the commencement of febrile symptoms. Whether it is by its action on the stomach and intestinal canal, or by producing diaphoresis, or by some peculiar influence on the nervous and circulating systems, that it produces its

favourable effects we cannot exactly say; but we know that it frequently succeeds in cutting short or removing febrile symptoms. All these matters are, however, sufficiently well known to every student, and require no comment.

In a preceding lecture, when speaking of the best means of procuring sleep in various forms of acute disease, I alluded to the peculiar narcotic power of the preparations of antimony, and dwelt on the benefits derived from a combination of antimonials with those medicines which are strictly termed narcotics. I told you in that lecture, that the good effects of tartar emetic in delirium tremens seem to be totally independent of its action on the stomach; for we had witnessed those effects when it had not excited either nausea or vomiting. I referred also to many instances of delirium tremens, in which opium in every form had failed in procuring sleep, and where a combination of tartar emetic and laudanum had succeeded in tranquillising the patient, and producing sound, refreshing sleep. Bearing this important fact in mind, we shall proceed to an examination of the circumstances which require the use of tartar emetic in fever.

There is a particular stage in one form of fever, and that exceedingly dangerous and threatening, in which I have derived most signal benefit from the use of this remedy. A patient, suppose, gets an attack of fever, he has all the ordinary symptoms, as thirst, restlessness, heat of skin, quick pulse, and headach. You are called in about the third or fourth day, and find that he has all the symptoms I have mentioned still present; his face is flushed, his head aching, his pulse from 100 to 110, but not remarkably strong; you find also that he has been sweating profusely from the commencement of his illness, but without any proportionate relief to his symptoms, and that he is restless and watchful. You are informed that his perspirations are so great that his linen has to be changed frequently in the day, and that, notwithstanding this, the pulse has not come down, the headach is undiminished, and the patient has become more and more sleepless. Here comes a very important practical question, namely,—How are you to treat such a case? The patient has no epigastric tenderness, no cough, no sign of local disease in either the thoracic or abdominal cavities; he has been purged, used diaphoretics, and perhaps mercurials; every attention has been paid to regimen, ventilation, and cleanliness; but still he lies there in a state of undiminished febrile excitement, with persistent headach, quickness of pulse, and sleeplessness.

In such a case as this you have nothing to expect from the sweating; it will never produce any relief. I was called some time back to see a young gentleman in fever, who was placed in similar circumstances to those which I have just detailed. It was about the sixth day of his fever, and I found him with a pulse of about 110, with considerable restlessness and headach, and was informed that he had per-

spired profusely from the commencement of his illness. On hinting the necessity of more active treatment than that which had been employed, his physicians appealed to the perspirations as decidedly contra-indicating depletion. They said that the profuse sweating pointed out the impropriety of active measures, and that it was a symptom which would be speedily followed by relief. I was convinced that they had taken a wrong view of the case, and stated as my opinion that nothing was to be expected from the perspirations; that when co-existing with a persistent febrile condition of the system, when accompanied by quick pulse, headach, and restlessness, perspirations always indicated the necessity for antiphlogistic measures, and in particular for the use of the lancet. I instanced the case of patients labouring under arthritis with profuse perspirations not accompanied by relief, and said that it was well known that such cases were most successfully treated by a full bleeding from the arm. I accordingly stated, that although the disease was of five or six days' standing, and the pulse not very strong, I would advise immediate bleeding. Sixteen ounces of blood were therefore abstracted, with some relief to the patient, and without increasing his debility; and it was then a question what further steps were to be taken. The young gentleman had been actively purged; he had no cough or abdominal tenderness; his symptoms were headach, sweating, and sleeplessness; and to these, nervous agitation had now become superadded. I proposed here what surprised my colleagues very much, and this was, to give our patient large doses of tartar emetic. They said the practice was very strange, but consented to give it a trial, on laying before them the reasons which induced me to prescribe it. I said, that in such cases the tartar emetic forming as it were a part of the antiphlogistic treatment, which commenced with general bleeding, would have a tendency to cut short instead of increasing the perspiration, by reducing the inflammatory state of the system on which it depended. The reasoning seemed rather paradoxical,—nevertheless it turned out to be correct. I ordered the tartar emetic to be taken in the quantity and mode in which it is generally prescribed in acute pneumonia: that is to say, six grains of tartar emetic combined with a little mucilage and cinnamon-water in an eight ounce mixture, to be taken in the course of twenty-four hours. After taking five or six grains, the sweating began to diminish; on the second day he scarcely perspired any, and his headach was greatly relieved; he began to improve rapidly in every respect, sleep returned, nervous agitation ceased, and convalescence became soon established.

The next case in which I employed tartar emetic with signal benefit was one of a very insidious character, as many of them are at present; they exhibit no prominent or alarming symptoms, and yet continue to run on

day after day without any tendency to crisis. The gentleman who was the subject of this case got an attack of fever unaccompanied by any remarkable peculiarity, except that he was very nervous, and alarmed about his situation. His fever went on day after day without any decided symptom; he had no distressing headach, no cough, little or no abdominal tenderness; there was no vomiting or diarrhœa; and his pulse was not much above the natural standard. He had been leeched over the stomach at the suggestion of some medical friends, but this was done rather by the way of precaution than for the purpose of combating any actual disease. About the eighth or ninth day the pulse began to rise; he complained of headach, and became restless and watchful. On the eleventh day the headach had greatly increased, he was in a state of great nervous excitement, and had not closed an eye for the two preceding days and nights. This state of insomnia and nervous agitation was immediately followed by violent paroxysms of delirium; his eyes, never closed in sleep, wandered from object to object with unmeaning restlessness; his limbs were in a state of constant jactitation, and he raved incessantly; his voice being occasionally loud and menacing, at other times low and muttering. His friends became exceedingly alarmed, and every remedy which art could suggest was tried:—his head was shaved, and leeched until they could leech no longer; cold lotions were kept constantly applied with unremitting diligence, and he was purged freely and repeatedly. At this period, that is to say, about the eleventh day of the fever, I was requested by this gentleman's medical friends to visit him. On examining the patient, I found that he was constantly making violent efforts to rise from his bed, and that he had a great deal of the expression of countenance which belongs to a maniacal patient. Under these circumstances, I advised the use of large doses of tartar emetic, in the mode already detailed, except that, in this case, in consequence of the violence of the delirium, I ordered the quantity prescribed for a dose to be taken every hour instead of every second hour. The patient took about ten or twelve grains during the course of the night, and next day his delirium had almost completely subsided. Under the use of the remedy he became quite calm, fell into a sound sleep, and began to recover rapidly.

In the two preceding cases, gentlemen, I was guided by ordinary principles, recognised by all physicians, and according to which the exhibition of tartar emetic is recommended in fever whenever there is undoubted evidence of determination of blood to the head, producing headach, loss of sleep, and delirium. In the cases which follow, tartar emetic was exhibited at a period of fever, and under circumstances that were, with respect to the exhibition of this remedy, not less novel than important. The principles which led me to

this practice have been long established, but nevertheless, the practice is entirely new, and (I say it with pride, for it has already been the means of saving many valuable lives) it is entirely my own.

Shortly after the commencement of our present session, Mr. Cookson, a pupil at this hospital, and remarkable for his diligent attention to clinical pursuits, caught fever while attending our wards, in which many cases of the present epidemic were then under treatment. His fever was of an insidious nature, not characterised by any prominent symptom, not exhibiting any local disease to combat, or any tendency to crisis. For the first seven or eight days, with the exception of headach, which was much relieved by leeching, he seemed to be going on very well; his skin was not remarkably hot; he had no great thirst, nausea, or abdominal tenderness; his pulse was only 85; and he had sweating, which was followed by some relief. About the eighth or ninth day the pulse rose, and he began to exhibit symptoms of an hysterical character. Now, in every case of fever, where symptoms resembling those of hysteria come on, you should be apprehensive of danger. I do not recollect having ever met with a single case of this kind which did not terminate in nervous symptoms of the most formidable nature. I prescribed at the time the usual antihysterical medicines, but without any hope of doing good, knowing that these symptoms were only precursory to something worse. I also, as a precautionary measure, had leeches applied to his head. The fever went on, the headach became more intense, he grew nervous and sleepless, and fell into a state of great debility. On the fourteenth day of fever his tongue was black and parched, his belly tympanitic; he was passing every thing under him unconsciously; he had been raving for the last four days, constantly attempting to get out of bed, and had not slept a single hour for five days and nights. Dr. Stokes, with his usual kindness, gave me the benefit of his advice and assistance at this stage of Mr. Cookson's illness, and we tried every remedy which experience could suggest. Blisters were applied to the nape of the neck, the head was kept cool by refrigerant lotions, the state of the belly attended to, and, as we perceived that the absence of sleep was a most prominent and distressing symptom, we were induced to venture on the cautious use of opium. It was first given in the form of hydrarg. c. cretâ, with Dover's powder, with the view of relieving the abdominal symptoms as well as procuring sleep. This failing in producing the desired effect, we gave opium in the form of enema, knowing its great power in the delirium which follows wounds and other injuries. This was equally unsuccessful with the former. He still was perfectly sleepless. We came again in the evening, and, as a last resource, prescribed a full dose of black drop, and left him with the conviction, that if this

failed he had no chance of life. On visiting him next morning at an early hour, we were highly mortified to find that our prescription had been completely unsuccessful; he had been more restless and delirious than ever. Here was the state in which we found him on entering his chamber at eight o'clock in the morning on the 15th day of his fever. He had universal tremors and subsultus tendinum, his eye was suffused and restless, he had been lying for some days entirely on his back, his tongue was dry and black, his belly tympanitic, his pulse 140, quick and thready, his delirium was chiefly exhibited in short broken sentences and in a subdued tone of voice, and it was now eight days and nights since he had slept. Here arose a question of great practical importance. How was the nervous agitation to be calmed and sleep produced? Blisters to the nape of the neck, cold applications, and purgatives had failed; opium in various forms had been tried without the slightest benefit; if sleep were not speedily obtained he was lost. At this emergency a mode of giving opium occurred to me which I had never thought of before. Recollect what his symptoms were at this period: quick failing pulse, black, dry, tremulous tongue, great tympanitis, excessive prostration of strength, subsultus tendinum, extreme nervous agitation, constant muttering, low delirium, and total sleeplessness. I said to Dr. Stokes that I wished to try what effects might result from a combination of tartar emetic and opium; I mentioned that I had given it in cases of delirium tremens with remarkable success, and thought it worthy of trial under the circumstances then present. Dr. Stokes stated in reply, that he knew nothing with respect to such a combination, as adapted to the case in question, that he had no experience to guide him, but that he would yield to my suggestion. We therefore prescribed a combination of tartar emetic and laudanum in the following form, which is that in which I generally employ these remedies in the treatment of delirium tremens. *R.* Antimonii tartarizate grana quatuor, tinct. opii. drachmam, misturæ camphoræ, ℥viij. Of this mixture, a tablespoonful to be taken every second hour. The success of this was almost magical. It is true that it vomited him; after taking the second dose he threw up a large quantity of bile, but it did him no harm. After the third or fourth dose he fell asleep, and awoke calm and refreshed; he began to improve rapidly, and soon recovered.

The next case to which I shall direct your attention is that of Mr. Stephenson, a pupil of Mr. Parr of this hospital. This young gentleman, as many of you will recollect, was attacked with fever about the middle of January. On Thursday evening he complained of languor and malaise, and on the following day felt himself feverish, but without any prominent or decided symptom. At night he took a dose of calomel and anti-

monial powder, which had no sensible effect, and the following day complained of shivering, violent headach, pain in the back, thirst, prostration of strength, and sleeplessness. He was ordered to take a combination of tartar emetic and nitrate of potash in camphor mixture, which produced a few loose stools and some diaphoresis; but in consequence of its effect on the stomach, and his complaining much of thirst and epigastric tenderness, the tartar emetic was omitted and effervescing draughts prescribed. Two days afterwards, the epigastric tenderness still continuing, twelve leeches were applied over the pit of the stomach, followed by blister, which gave relief, and the bowels were kept open by enemata. He commenced a second time the use of the tartar emetic and nitrate of potash, with the addition of five drops of tincture of opium to each dose, but was obliged to give it up again in consequence of the increase in his gastric symptoms. He now became exceedingly restless, and his delirium began to assume a very intense character. Leeches were applied behind the ears, his head shaved and his temples blistered; he had also a large blister over the abdomen, which gave him considerable relief, but the cerebral and nervous symptoms became much worse. The delirium went on increasing, accompanied by subsultus tendinum, and picking the bed-clothes; he was perfectly sleepless, raved incessantly, and had to be kept down in bed by force. On the 17th day of his fever he was in the following condition,—tongue brown and rather dry, no remarkable thirst or abdominal tenderness, eyes red and ferrety, no sleep for five nights, constant muttering and delirium (which had now assumed the character of delirium tremens), subsultus tendinum and jactitation extreme, urine and feces passed under him unconsciously. I directed the combination of tartar emetic and laudanum to be immediately given, carefully watching its effects. He had only taken two doses when a degree of calmness set in, bringing with it relief to all his symptoms, and before a third dose could be administered, he fell into a profound sleep, from which he awoke rational and refreshed. The mixture was continued every four hours with increasing benefit, he slept long and soundly, and began to improve in every respect. On the second day after he had begun to use the tartar emetic, he took a little porter, which was changed the next day for claret and chicken broth. In about a week he was able to sit up in bed, and seven days afterwards was able to leave the hospital and go to the country for change of air.

The last case to which I shall direct your attention is that of Mr. Knott, also a pupil of this hospital, a gentleman remarkable for his unremitting attention to clinical pursuits, and from whom I derived much valuable assistance in conducting various post-mortem examinations. This gentleman was attacked

with fever about the latter part of January, which went on for some time without any particular symptom, except considerable restlessness and nervous excitement. He then became perfectly sleepless, complained of violent headach and thirst, raved, and became exceedingly irritable. Opium in various forms and repeated doses, either alone, or combined with musk and camphor, totally failed in producing sleep, and his condition became daily worse. On the 13th day he was in a very dangerous condition; his nervous agitation had risen to an alarming height, and for many days and nights he had never closed an eye. At this period it appeared obvious that if something were not done to calm nervous excitement and restore sleep, he had but little chance of life. Under these circumstances I proposed to my friend, Dr. M'Adam, who attended with me, to give tartar emetic and opium. After he had taken about three table spoonsful, he had a copious bilious evacuation, and immediately afterwards fell into a sound sleep, during which he perspired profusely, and awoke in about twelve hours, with every bad symptom gone. The nervous irritability was completely allayed; his thirst and head-ache relieved; his tongue moist and cleaning; and his reason quite restored. From that period everything went on favourably, and he rapidly regained his health and strength.

Since the foregoing lecture was delivered, I have met with several cases of fever, in which I employed the tartar emetic and opium, with the same remarkable success. A man named Christopher Nowlan was admitted into Sir P. Dun's Hospital, on the 3rd of February last, labouring under fever. He had been ill ten days, had raving, subsultus tendinum, and appeared unable or unwilling to answer questions. His wife stated that he had diarrhoea for the preceding three days, and that he dozed occasionally, but never slept. He appeared exceedingly low and prostrated, and lay constantly on his back. A succession of flying blisters were ordered to be applied to the chest and stomach, and wine and chicken broth prescribed. He also got the following draught every third hour:—

℞ Mist. camphoræ, ʒj. ;
 Spirit. ætheris oleosi, ʒss ;
 Spirit. ammoniæ aromaticæ, ʒss ;
 Moschi, gr. viij.—Misce.

Under the use of these remedies he began to recover from his prostration; but as the sleeplessness and delirium still continued, I ordered him to take the tartar emetic mixture in the usual way. It produced at first two or three full discharges from the bowels, and after he had taken the fourth dose he fell into a sound sleep, from which he awoke much better, and soon became convalescent.

In the case of a patient named Michael Murray, who exhibited the same remarkable nervous irritability and sleeplessness, this

remedy was also employed with very striking effects. This man had been ill of fever for ten days before his admission into Sir Patrick Dun's Hospital, and appeared so much prostrated, that I ordered him arrow-root, with beer. He raved a little on the night of his admission, and remained without closing an eye until morning. The same symptoms were observed on the following day, and his nervous irritability became increased. On the 14th of February he had been five days in the hospital, and had not enjoyed a single hour's sleep. I ordered the tartar emetic mixture to be given: three doses produced sleep: he had no other bad symptoms, and recovered completely.

In another very bad case of maculated fever, the same results were obtained. The patient, Mary Farmin, had got an attack of fever after a fright. She had been eight days ill, at the date of her admission, February 25th. She had irregular pulse, sleeplessness, headach, and suffusion of the eyes; moaned and sighed continually, and appeared greatly prostrated. She was blistered, had foetid enemata, and took the chloride of soda internally with some benefit; but the sleeplessness and nervous excitement continued. In this case, though the tartar emetic was not followed by speedy convalescence, still it produced remarkably good effects; after taking four doses of it, she fell asleep, and did not awake until next morning.

There are many other cases which I could adduce to prove the value of a combination of tartar emetic and opium in the nervous sleeplessness of low fever; the foregoing, however, I trust will be found sufficient.

I forgot to observe, that all the cases I have spoken of as successfully treated by means of tartar emetic combined with opium, in the advanced stage of the disease, were cases of maculated or spotted fever. I shall take a future opportunity of entering more fully into a detail of its symptoms.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXX.

Dystocia Pelvica.

GENTLEMEN,—At my last lecture I mentioned to you those causes of *dystocia pelvica* which act internally or generally: let us now consider those which act externally or locally. External pressure, independent of the existence of mollities ossium, is capable of greatly influencing the form of the pelvis; the sending children to day schools, where they have to sit the whole day on hard benches, cannot

but be injurious in this respect, for the sacrum as well as the inferior aperture yield to the action of this constant pressure. Riding at a very early age I should consider injurious, and it is said that the females of those American nations who are constantly on horseback bear but few children, and are frequently three or four days in severe labour. Deformity of the pelvis, however, appears to be a very uncommon occurrence in the United States, for Dr. Dewees, after a practice of nearly thirty years, declares that he has only met with pelvic deformity in America three times, and that every case of the sort which has required assistance has been uniformly with European women.

Overloading the spine in young girls will produce equally mischievous effects; thus the constantly carrying a heavy child in her arms, or lifting heavy weights, is a frequent cause of pelvic contraction among the poor, and I think that this is peculiarly the case among the lower Irish. Supporting the weight of the trunk upon the pelvis for many hours without relief is very injurious in young persons, and if at all persevered in cannot fail to alter the form and symmetry of the pelvis, &c. The abominable system of making young children work for twelve, fourteen, or even more hours every day in the factories of this country, is a disgrace to the name of a civilised nation; the cases of early deformity, and the thereby permanently entailed miserable existence, which have been disclosed by the philanthropic exertions of the late parliamentary commission for investigating factories, are of such atrocity as to make the slave trade of the present day (with few, fortunately rare, exceptions) almost sink into comparative insignificance, and I trust have excited sufficient interest in the mind of the nation to prevent either their continuance or repetition.

The apertures or cavity of the pelvis may be diminished by exostosis, although the pelvis itself be in other respects perfectly well formed; this may arise from wounds of the periosteum, from fracture, callus, &c.; cases of this sort have been but seldom treated of, for they occur very rarely. Sandifort mentions a case where he had to perforate the head on account of exostosis, but as the pelvis was never examined after death, we cannot place much reliance upon it. We find in almost every work on midwifery, exostosis mentioned as a cause of difficult labour, and see it described just as if it were a circumstance of not unfrequent occurrence; it is, however, *exceedingly* rare, and I know only of two cases of the sort, one which is recorded by Dr. Dewees, in his "Essays on Subjects connected with Midwifery," where rupture of the uterus was the result; the other is a highly interesting case, which occurred some time ago to the late Dr. Leidich, of Mayence, and which has been lately published in an inaugural dissertation at Heidel-

berg by my friend Dr. Von Haber, of Carlsruhe. The particulars of the case are these, — a peasant girl, carrying a considerable load upon her head in winter over an extensive tract of water, which was frozen, slipped, and fell with great violence upon the ice; on recovering from the blow she tried to rise, but was unable to do so; in this state she was found and carried home, and, after some time, apparently quite recovered from the effects of her blow. She married shortly after, and soon became pregnant; when labour came on it was found impossible to deliver the child by the natural passages, on account of a large mass which projected into the cavity of the pelvis; the Cæsarean operation became necessary, and it was performed, but with an unfavourable result; on dissection after death, the pelvis, which was perfectly well formed, was found filled up by an immense exostosis, springing from the inner surface of the sacrum; its structure, as you see (showing a drawing), is cellular, and was found to be as hard as the petrous portion of the temporal bone; the mass, as you see from these other views of it, rose to some height above the superior aperture, which, with the cavity of the pelvis, it almost entirely filled.

Besides these various causes, "the capacity of the pelvis (as Dr. Campbell observes) may be diminished by the general tumefaction of its lining, consequent on interrupted circulation from the long detention of the child's head, or from frequent examination. This cause of protraction is of no ordinary nature, since unless the case be promptly and energetically attended to, the result may be calamitous from lesion of structure. Unless a practitioner has had the management of the patient from the commencement of labour, he is apt to view this variety of diminished capacity as arising from original defect in the development of the bones themselves. The happiest results will be derived in cases of this nature from venesection carried to the extent the vigour of the patient will admit, and the urgency of the symptoms will demand." After a severe labour, from diminished capacity of the pelvis, the head frequently has a deep depression upon it when born: this occurs when the promontory of the sacrum projects considerably, and I have seen it so deep that I could place my finger in the groove thus formed; the parietal bone may even be broken, a fact of which, till lately, people have not been sufficiently aware; and there have been cases where children have been born dead, which were suspected to have suffered violence from their mothers, on account of the head having been greatly distorted, and one of the parietal bones found fractured. After a time, the continued pressure of the head against the os uteri and the parts between the uterus and symphysis pubis, may produce fatal mischief, the posterior wall of the bladder will quickly pass into gangrene, sloughs will be produced, and the patient rendered miserable for life. "Al-

though the head is moveable, it cannot long continue in the pelvis, without impeding the venous and lymphatic circulations through the pelvis, which, with consequent tumefaction, inflammation, and sloughing of some important viscus may reduce the patient to a loathsome condition, or be followed by fatal results. When, on the other hand, the fetus has been long exposed to pressure, the teguments of the scalp gradually become tumefied, and consequently approach nearer the vulva, by which the young practitioner is led to think that the head is actually advancing, though it is as stationary as before*." It is impossible to fix how long labour may be retarded by this or that degree of locked head. When you have had some little experience, you will frequently meet with cases where the first labour was perfectly natural and easy; the second was attended with much difficulty, and where it was necessary to apply the forceps; the third, where the difficulty was so increased as to require the perforation; and the fourth, where the labour was, like the first, perfectly easy and regular. This difference may arise from various causes: in one labour the head may be larger than in another, the bones may be more ossified one time, whereas at another they may be more flexible and yielding. The fontanelles may vary in size, nor is it easy to decide how much pressure the head of a full-grown fetus can bear without endangering life: it is remarkable what a degree of pressure and violence the foetal brain can bear without destruction of life. There are cases on record, where the perforation has been performed, and yet the child, when born, actually cried, and some have lived sixteen hours after. This horrible result should by all means be avoided; and in all cases of perforation, especially where there is any reason to fear that the child is still alive, you should be careful to break down the whole structure of the brain as much as possible: the evacuation of the cerebral mass is greatly facilitated, and we are enabled to use the syringe, as I described, with much greater effect.

The manner in which Nature shapes the head by the pressure of the uterus, in order that it may pass through the uterus, is so beautifully adapted to the purpose, as to be imitable by art. It might be asked, what are the cases in which we may venture to wait, and thus ascertain how far nature will assist in adapting the head so as to pass through the pelvis? I would answer, in *those* cases where the pains are equable and moderate: where, on the contrary, they are vehement, one dares not to wait, for we are in momentary danger of rupture of the uterus, &c.; but where the bones of the head have time to yield, or to overlap each other, the head moulds itself to the passage, and there is a better chance of its being expelled by the natural means; where the pains are steady,

but gradual, it is astonishing how the head will lengthen itself out, and adapt itself to the passages. Solayres de Renhac observed a case where the head was so elongated that its long diameter was eight inches, all but two lines, the transverse being only two inches and five or six lines.

In cases where the trunk has been brought away, and separated from the head, which still remains loose above the superior aperture of the pelvis, it is frequently impossible to fix either the forceps or crotchet upon it so as to bring it down. Under these circumstances it will be better to leave it to nature, for, after a little time, the gradual pressure of the uterus will so model and configure the shape of the head as to expel it without further assistance.

La Motte gives an excellent case to show the power which nature can exert in expelling the head when separated from the body. "A surgeon of Valognes being sent for to a captain's lady of the parish of Letre, found her half delivered when he came, i. e. the body was come away, and the head left behind. He tried for a long time to get it out, but the woman at last found herself so exhausted, that she chose rather to die than purchase life at the expense of any more torments; upon this he went to bed, and the first news that was told him in the morning was that the head was come out by the mere assistance of nature, a thing he never could have believed, if he had not been an eye-witness himself."

As long as the antero-posterior diameter is more than three inches in length, we are justified in trying to deliver with the forceps, but when it is less than three inches, delivery cannot be accomplished without destruction of the child. How some of the continental accoucheurs, as, for instance, the late F. B. Osiander of Gottingen, and Professor Joerg of Leipsig, can assert that they can deliver a full grown foetal head with the forceps, where the antero posterior diameter is only two inches and a half, I cannot conceive. My first question would be, what was the state of the head, and was it fully developed? My second, what became of the mother? After such deliveries practitioners have been surprised that their patients died, and that, on opening the bodies, they should find nothing but a little extravasation of blood on the posterior part of the cervix uteri and vagina. This they passed over, and considered that she had died of exhaustion, &c.

Before quitting this subject, I must mention to you a peculiar species of pelvic deformity which Professor Naegel has very recently brought before the notice of the profession in Germany, and which is of the greatest interest and importance. The antero-posterior diameter is not diminished, and, with the exception of the peculiar deformity to be noticed, the pelvis have been perfectly well shaped. The whole pelvis appears to have been twisted or wrung over to one side, so that one oblique diameter is considerably above, while the other

* Campbell.

is as much under the usual length. One side is much flattened, the other bulges out remarkably, so that in placing a pelvis of this sort straight before you, you look directly into one acetabulum and can scarcely see any thing of the other. A remarkable peculiarity in all these pelvis is, that the sacro-iliac synchondrosis on the flattened side is entirely ankylosed, so that there is no trace whatever of former separation, and the sacrum on the same side appears considerably wasted. In every instance where the history of the case has been ascertained, the patient has died during, or shortly after, her first labour. My friend has requested me to translate this interesting essay, and therefore you will shortly have an opportunity of knowing the particulars of this peculiar species of pelvic deformity*.

Having treated of labours completed by means of the forceps, turning, artificial premature delivery, the Cæsarean operation, perforation, and embryulcia, I have now merely to mention to you two other methods of delivery which have been recommended in dystocia pelvica, viz. the artificially preventing the development of the fœtus, by bleeding, laxatives, strict regimen, vegetable diet, strong exercise, &c., and, secondly, by inducing artificial abortion in cases where, otherwise, the Cæsarean operation is unavoidably necessary. As to the first plan, the question is whether it be really true that by evacuation, starvation, and other means to lower the system, we can act upon the fœtus, so as to retard its growth and development? We cannot, gentlemen, and it is a mode of treatment which may prove very injurious to the mother. Experience teaches us that weak, thin, and sickly women often bear large children; and we frequently observe in women who have suffered during their whole pregnancy from constant vomiting, so as scarcely to bear any nourishment, and in consequence of which they are much reduced. Baudelocque has given a case of this sort in his second volume. On the other hand, women who have a good appetite, and eat largely of rich and nutritious food, frequently bear small and weakly children. This plan of depletion is also very injurious as respects the labour itself, for if it prove at all difficult, it will require a degree of strength which the mother does not possess. You may easily lower the strength of the patient beyond what is safe; and, after all, is not the premature labour, artificially excited, much to be preferred? Ask any of your friends who have been some time in the profession, and who are men of observation, and they will tell you that those females who are sickly and emaciated generally bear the largest children; this is also the case with animals. Baudelocque has pub-

lished a case in the *Journal de Médecine* (tom. xxix., April), where the patient was bled twenty-four times in twelve days, and, nevertheless, bore a large and stout child. Mauriceau gives the histories of two women who went to the full term of utero-gestation, although one was bled forty-eight times, and the other actually ninety times, for inflammation of the chest. As to artificially exciting abortion, in order to avoid the Cæsarean operation, this *might, perhaps*, be justifiable in her first pregnancy, where the extent of pelvic deformity had been satisfactorily ascertained, but under no other circumstances; and Reisinger, who has paid considerable attention to it in a juridical point of view, declares that in no case ought this operation to be attempted in order to avoid the Cæsarean operation.

Having concluded the subject of dystocia pelvica, I come now, gentlemen, to the fifth species, viz. where parturition is rendered difficult or dangerous from a faulty state of the soft passages. Authors have asserted that the uterus can mechanically obstruct the progress of parturition by its position. In the last century the situs uteri obliquus was universally considered as the most common cause of difficult parturition, and this idea, as I before told you, was first adopted by H. van Deventer. In spite, however, of its being so universally received, the celebrated Peter Camper declared that the oblique position of the uterus being a cause of difficult labour existed merely in the imagination, but not in the reality, nor does the admirable Smellie mention a word about it. Mursinna, staff physician at Berlin, after an extensive practice of more than thirty years, declared that he had never met with a case where labour was protracted from oblique position of the uterus, and this opinion is confirmed by the authority of Chapman, Ould, Pugh, Denman, Boer, Dewees, and others, nor have I ever met with a case of protracted labour which I could consider as having been produced by this state of the uterus. Dr. Dewees, who denies that obliquity of the uterus can ever act as a cause of mal-position of the child, nevertheless considers that in cases of extremely pendulous belly, the os uteri may be situated so backward that its dilatation may be rendered slow and painful, and if the pains be brisk the head will be found to sink lower and lower into the pelvis, covered by the anterior portion of the uterus. Thus, in a case where the patient had always suffered very tedious labours, with a remarkably pendulous belly, and where, in the present labour, he had waited several hours without the head advancing at all, he had her turned upon her back, and the abdomen supported by means of a broad towel, at the same time introducing a finger into the os uteri, he drew it towards the symphysis pubis, and then waited for the effects of a pain; one soon showed itself, and with such decided efficacy, as to push the head into the inferior strait, and three more delivered it.

* This lecture was delivered Jan. 6, 1835, the paper of Professor Nægele's, above alluded to, appeared in our *Journal* for April 18, 1835.

To the causes of this species of dystocia belong also *rigidity of the os uteri*. This may arise either from dynamic or mechanical causes; for instance, the first may result from a spasmodic contraction of the os uteri; it does not dilate, but the edge remains thin; the pains are unusually intolerable; and there is little or no secretion of mucus about it or the vagina. Perhaps it becomes dilated to about an inch, and remains so. When this state occurs in a plethoric subject, a venesection will prove of great service. Recollect, gentlemen, that *a thin os uteri never dilates*, but as soon as it swells and becomes soft and cushiony, then it begins also to dilate. The reason for this I explained to you some time ago when describing the changes which the os uteri undergoes during the various stages of labour; nor can I conceive why the works on midwifery should all say exactly the contrary, because upon a knowledge of this fact depends our capability of estimating the effects of the pains, and forming some idea as to the probable duration of labour. If, however, the patient be not plethoric, but of a nervous irritable habit, I should, under such circumstances, order an opiate injection. It is a rule, you know, generally, to give about four times the quantity of laudanum in a clyster that we should by the mouth; but I cannot coincide with this rule, for the same quantity of opium when given in a clyster acts just as powerfully as when given by the mouth,—perhaps even more so; and this may probably be explained from the opium losing some of its power by being acted upon by the gastric juice*. Opium relieves the spasms and diminishes the pains, and this is highly desirable, for the os uteri will not dilate until general and regular contractions of the uterus have been induced.

The belladonna was recommended some years ago by a practitioner, in the *London Medical Repository*, who, reasoning on its peculiar action upon the circular muscle of the iris, proposed to use it in cases of spasmodic rigidity of the os uteri. Chaussier, physician to the Maternité at Paris, tried it in the form of ointment, and found that it answered well. It has been tried by others both in France and this country; but we must use it with great caution, for it is a dangerous remedy, and easily induces headach, sickness, vertigo, and other distressing symptoms. Vapour baths and the common warm bath are the best local means for relaxing such a stricture. The os uteri may be rigid from callosities and cicatrices, the result of former difficult labours, ulcerations, &c. &c.; such an os uteri may oppose very great resistance to the progress of parturition. In his 29th chapter, which he has devoted to the consideration of rigidity of the soft parts, &c., Dr. Dewees has given some

* This observation, Dr. R. remarked, had been recently confirmed by Dr. Graves, in his Lectures published in this Journal.

very interesting and highly valuable observations. Several cases of stricture in the passages from callosities, the result of former lacerations and sloughing, have occurred to his notice, in all of which he has succeeded perfectly by the use of bleeding to syncope. In order that you may form a correct idea of the obstacle which such cicatrices can create to the passage of the child, and the remarkable influence which such cicatrices can create in rendering them dilatable, I must beg to refer you to his admirable "Compendious System of Midwifery," § 907. If these means do not succeed we must resort to the last remedy, viz., dilating the part by the knife. You will recollect, I trust, the directions I gave you on this subject, under the head of Imperforate Vagina, especially to make your incisions *during* a pain, because now you can feel exactly the point of greatest tension and resistance, and at this moment the patient is not sensible to the cutting of the knife. My friend Dr. Locock had a peculiarly aggravated case, which was treated in this manner with perfect success, and the patient delivered of a living child. A case of this sort occurred to Moscati, an Italian practitioner. Being afraid to make a considerable incision into the os uteri, on account of a previous case which his father had treated, and where the uterus, on cutting through the os uteri, immediately tore much further, he avoided this danger, by making a number of short incisions round the whole mouth of the womb. F. Ould recommends, where the os uteri is undilatable from schirrus, cicatrices, &c., that an incision should be made into the *posterior* part of the os uteri.

The vagina of itself may be unyielding, as is said to be the case in women considerably advanced in years, and pregnant for the first time. Upon the whole I scarcely think this is correct, for I have had several cases of primiparæ turned of forty, where no peculiar difficulty presented itself; while I have not unfrequently observed a protracted labour in primiparæ who were under twenty. I have known cases where the vagina was obstructed by a false membrane, or grown together, the result of injuries, as from burns, inflammation, &c. These obstructions generally yield as the head advances, and do not occasion much difficulty. If, however, the obstacle be considerable, you must act according to the directions I gave you when speaking, at the commencement of this course, of imperforate vagina.

The perinæum may be unusually broad, and thus protract labour. Prof. Kluge, of Berlin, has lately proposed to cut it so as to facilitate the passage; but I am convinced that where the perinæum is too tight, an incision into it will only make it tear further than it otherwise would. It may be so formed that it will not dilate, being hard and callous from the cicatrices of former lacerations, &c., and here an incision will sometimes be necessary. During

last summer, I met with a curious *lusus nature* in the structure of the perinæum: a firm ligamentous cord divided the *os externum* into two halves, extending from the *frænulum perinæi* behind to the mucous membrane covering the anterior portion of the urethra before, about as thick as my little finger in the middle, becoming broader at its extremities; the child presented with the head, which rested completely on this preternatural barrier, so that a deep indentation upon the presenting part had already been formed when I arrived at the Lying-in-Hospital. My friend, Mr. A. Dalrymple, one of the house-surgeons, passed a curved bistouri, and divided it during a pain without the patient being aware of what he was doing, although it made a considerable resistance; the head followed instantly.

Varicose swellings of the labia will *not* protract labour, as has been asserted, for sooner than do this they will burst. This may produce dangerous hæmorrhage, but it may be repressed by holding against the part a sponge dipped in some astringent mixture, or a moist sponge covered with an astringent powder, as bark, kino, &c.; when labour is over it will generally cease of itself, or at least become very inconsiderable. The labia are liable to become œdematous during pregnancy, which is frequently productive of serious inconvenience. Besides preventing the patient from moving about, they are unavoidably exposed to the action of the urine every time that the bladder is evacuated, which inflames them, producing severe excoriation, and occasionally running into extensive ulceration and even gangrene. But the tumour is seldom so extensive as to present any obstruction to the passage of the child, and opening it to evacuate the fluid cannot be recommended, as a foul, sloughing sore is very apt to be produced. "I have never," says Wigand, "found it necessary to open the swelling of anasarca labia, for the passage of the child's head was in no wise impeded by their presence, and by merely keeping the patient warm they generally disappeared in eight or ten days." I have seen cases where the *nymphæ* alone were affected, and where the swelling was so considerable as to make them hang down in a fluctuating bag of fluid several inches below the labia; warm, stimulating fomentations, as camomile flowers moistened with hot Port wine, &c., and constantly renewed, rapidly produce absorption. In general, strict attention to cleanliness, both before and after labour, will be sufficient. Dr. Burton has given a case of this sort of unusual severity. "The patient was but eighteen, and within a month of her reckoning; her legs and thighs were monstrously swelled, and the pudenda so large that the patient could not lie, except upon her back, and stretch out her legs and thighs wide enough, without compressing and crushing the labia, wherefore she extended one leg as much as she could to one side, and raised the knee of the other as high as she could to give room for the tumour side-

ways. In this condition I found her, but with pains also in her body, which made me apprehensive she might fall in labour before anything could be done to disperse the tumour. She was but of a feeble constitution, and had a weak pulse. I ordered a restraining cataplasm, with a proper compress and bandage outwardly and an opiate inwardly. The next morning her pains were quite gone, and the tumour much lessened. She continued this method for three days, and the labia were so much reduced, that had she continued for a few days longer before she fell into labour, in all probability they would have been near their proper size; but, although they were greatly reduced, they were yet so large as to make the entrance into the vagina narrower than it should be. In this condition she fell in labour. I was sent for directly, but did not get to her till she was delivered of a living child. I examined her and found the perinæum lacerated very much, which mortified in four days, notwithstanding all the care that could in such cases be taken."

Scirrhus, steatomatous, and other tumours may obstruct the progress of parturition, but this is seldom the case, for, by the gradual pressure of the head, they generally yield sufficiently so as to allow the child to pass. I had once a case where the patient, a pale, cachectic-looking woman, who was suffering under a fetid sanious discharge, which greatly reduced her, declared herself nevertheless pregnant, and about seven months gone. On examining I found the *os uteri*, with the exception of a very small portion, converted into a hard, irregular, schirrus-like mass, in which the form of it was completely lost. I could just pass the tip of my finger through it, where its edge still remained, and found the lower segment almost entirely filled with a large fungoid mass of the same disease. I naturally concluded that with this extent of disease she could not be pregnant, but that the swelling of the abdomen, which was not remarkably large for the seventh month, was the result of a general scirrhus enlargement of the uterus. I was, however, mistaken, for in a few days after evident labour-pains came on, the *os uteri* began to dilate, and, after a little time, I could plainly feel the head of a small child pressing against the tumour; this gradually yielded as the head advanced, and the child was born without any difficulty.

The distended bladder, or, what is worse, a urinary calculus, may seriously obstruct the progress of labour. Dr. Merriman has related a case of distended bladder, which was pushed down before the head into the pelvis, and actually perforated, under the idea of its being a hydrocephalic head.

Reviews.

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CONTAINS, first, a Case of Obscure Pericarditis, accompanied with Dilatation of the Heart, with a peculiar species of Tumour in the right and left Ventricles and right Auricle—Œdema of the Fauces, Larynx, and Glottis—Death from Suffocation; second, on the Mechanism of some Diseases of the Sympathetic Nerve, by W. W. Waddel; third, Reports of Cases treated in the Medical Wards of the Pennsylvania Hospital—Typhus and Remittent Fevers; fourth, Report of Surgical Cases of the same; fifth, Remarks on the Medicinal Properties and Effects of the Prussiate of Potash, or Ferro-cyanate of Potassa; sixth, cases in Midwifery; seventh, Observations on Lepra and Psoriasis; eighth, on the Influence of Vaccination in counteracting the Effects of Small Pox Contagion; ninth, Accidental Occlusion of the Vagina, forming an obstacle to Delivery.

The first article worthy of our notice is Art. vii. Observations on Lepra and Psoriasis, by C. W. Pennock, M.D.

After making a few observations on the inaccuracy of the terms, our author commences by stating that—

“This disease makes its appearance by the formation of slight elevations resembling enlarged papillæ of the skin, which are firm and solid, and which are covered with thin, dry scales; small circular and raised patches of diseased surface form; the central portion soon becomes healthy, leaving raised circles of morbid structure of the skin. In the subsequent observations, the changes which the disease presents in its various stages, will be given in detail.

“Psoriasis bears so striking an analogy to lepra, that both have been considered as being essentially the same disease. In each the commencement is by small and hardened elevations, covered by thin, dry scales; the causes producing them are the same, and the only important difference existing between them, are the varieties of figure. In confirmation of the truth of this position, it may be observed, that spots of lepra corresponding with the description of Willan, are frequently seen intermixed with those of the irregular patches of psoriasis. Facts in accordance with this view, will be seen in the following cases.

M. Bielt, to whom the medical world is so greatly indebted, has recently added to the therapeutic agents for the treatment of these diseases, by presenting to our view details of the successful employment of a new combination of iodine (the ioduret of ammonia), as a local application to the morbid surfaces. Several instances of the signal advantages of this practice will be exhibited in the ensuing observations.

“CASE I.—*Lepra Vulgaris*—Cured by the *Homœopathic Treatment*—Relapsed at the end of five months.—Labbé, a locksmith, aged 21, light hair, fair skin, and though of a lymphatic constitution, his general health is good. His parents were free of cutaneous disease.

“The patient entered l' Hôpital St. Louis in March, 1832.

“In the month of March, 1832, he was affected with severe itching sensations, commencing on the scalp of the head, which in the space of a week extended over the body to the thighs. The disease of which this was the precursory symptom, resembled exactly (says the patient) the present affection. Under the treatment by sarsaparilla, alkaline and sulphur baths, and the internal use of pills (the composition of which is not stated), he recovered at the end of three months.

“In the following July, the disease re-appeared on the legs, arms, and on the head, in the form of small scales on a red base, which was slightly raised above the level of the skin; these scales were dry, and of a white, shining, micaceous appearance. The elevations were circular, and varied in diameter from two lines to half an inch; they were equally raised in the centre, as at the circumference, and touched each other at their outer border. Their appearance was that of psoriasis guttata. They covered the back, breast, and the external part of the superior and inferior members. The patient was ordered a solution containing one millionth part of a grain of arseniate of potash, which was prepared in the following manner:—A grain of the arseniate of potash was dissolved in an ounce of water, which contains six hundred drops; one of these drops containing one six-hundredth of a grain, was put into an ounce of distilled water, of which one drop then contained one thirty-six hundredth of a grain of the salt, and thus the dilution was proceeded in, until the minute dose of a millionth part of a grain was obtained.

“The patient was interrogated each day respecting his feelings, the state of the secretions, &c.; in a word, as regards his general health. No perceptible effect was produced, yet notwithstanding this, the patches became smaller, the desquamation ceased, and on the places which had been affected by the disease, circles were seen, where the skin was grayer than that of the healthy parts, but without being either raised or depressed; these spots rapidly became paler, and the patient left the hospital on the 3rd of June, completely cured. He had taken during his residence there, one eight-thousandth part of a grain of arseniate of potash.

“The 2nd of December, 1833, the patient re-entered the hospital. The psoriasis had re-appeared in the scalp in the form of small circular spots, from two to three lines in diameter, very little raised, and covered with scales; there were also some on the back. As long as they were from two to three lines in

diameter only, they were equally elevated on all parts, but as soon as they increased to the size of a ten cent piece, they healed in the centre, the borders remained elevated, and formed circles, from which the desquamation was trifling. The scales are of a pearly white, the size of the bran of wheat.

“*Remarks.*—This case is an example of *lepra vulgaris* better characterised than any I have observed. It should be remarked, that it commenced in the form of *psoriasis guttata*. This, in fact, in all the cases which I have seen, is the beginning of *lepra*. Ordinarily, however, *psoriasis diffusa* is observed as intermediate between the *guttata* and *lepra*; in this instance the transition was direct from the primitive form to that of *lepra*. The rapid disappearance of the squamous disease, whilst the patient was under the homœopathic treatment, is certainly very remarkable; but does the case prove that the cessation of the disease was due to the administration of the *one eight-thousandth part of a grain of arseniate of potash*? Is it not rather an instance, illustrative of the fact, that *lepra* does sometimes disappear spontaneously?

“*CASE II.—Psoriasis Guttata and Diffusa, with Lepra Vulgaris—Treated by Frictions of Ioduret of Ammonia.*—Christopher, a weaver, twenty-seven years of age, was received in the Hospital St. Louis, in November, 1832. He has red hair, his stature is short, is thick set and very muscular.

“In the month of November, 1827, isolated and distinct pustules appeared on both his arms.

“In February, 1828, these pustules became more numerous; but in the month of May they were cured by the application of a domestic remedy, consisting of a mixture of salt, pepper, and butter. At that time, some small, dry scales on the arms were observed, but which shortly afterwards disappeared; the scales, however, re-appeared in the following August. They were situated on small, rounded, red elevations. In October the patient saw some which were half an inch in diameter on several parts of the legs and body, and in February the body was covered with these patches.

“On the 18th of March, 1829, he entered the Hospital of Nancy, where he was placed under the treatment of frictions, with calomel ointment, and the internal use of pills of the *Polygonum bistorta*, by which means the disease was diminished in intensity. Subsequently the patches were cauterised with nitrate of silver, and several of them disappeared. This amelioration was but momentary, and on the 4th of November he left the hospital; the eruption having been but slightly modified. In the winter of 1829 and 1830, the itching sensation had almost ceased on the diseased parts, though the patches had increased in size, and the scales which covered them were greatly augmented.

“During the year 1830, he renounced all

treatment, and the disease was not changed in its character.

“In June, 1831, he cauterised himself with an empiric solution, the composition of which is unknown, which caused a prickling sensation in the diseased surfaces, and the patches disappeared. The eruption re-appeared in November, and he re-entered the Hospital of Nancy, and remained there some time without any amendment, and subsequently entered the Hôpital St. Louis.

“April, 1832. *Present state.*—The arms and legs of the patient present,

“*First.* Spots, some of which are as large as the hand; others the size of a ten cent piece, red, raised, and covered with scales, which are dry on their internal and external surfaces, and of a pearly whiteness.

“*Secondly.* Circles from one to two inches in diameter, of which the borders are elevated, and covered with scales, whilst the central portions are healthy, and on a level with the sound skin. These are situated principally on the abdomen.

“*Thirdly.* Other spots, of the size of a small pea, which are slightly raised above the skin, are of a bright red colour, which disappears upon pressure, and are covered with minute scales, having the characters of those first mentioned; these elevations are the seat of violent itching. In the course of two months these spots become much enlarged, and form patches an inch in diameter, the skin in the centre of which is without scales, smooth, and healthy; the outer border remaining elevated, and covered with small dry scales.

“During two months, pills of the sulphuret of antimony were administered to the patient, but were discontinued in consequence of the violent gastric pains which they caused. From the 22nd of April to the 22nd of July, the tincture of cantharides was exhibited, without producing any sensible change.

“He left the hospital about the 1st of August, and again became a patient at the Hôpital St. Louis on the 6th of September. At that time the squamous state of the skin was similar to that already described, with the exception that none of the spots presented the appearance of *psoriasis guttata*.

“The treatment was resumed by exhibiting two, and subsequently four drops, three times a day, of Fowler’s solution, which was continued during a month without producing any diminution of the eruption; the itching sensation, however, was greatly aggravated, and on the 2nd of October M. Gibert directed the employment of frictions with the ointment of the ioduret of ammonia, ℞ss. morning and evening. These frictions were continued twenty-nine days; the patient then took eight alkaline baths.

“The result of this treatment was very satisfactory; all the spots entirely disappeared. Their places were indicated by a slight red colour, in which neither elevation, fissures, nor induration of the skin were observable.

"November 8th.—No frictions had been used for twelve days. Two or three spots appeared on the arm. He was directed to use frictions on the affected limb, but not on other parts of the body.

"December 5th.—The disease re-appeared on all sides; on the edges of the old cicatrices on the formerly healthy parts of the skin. He engaged himself as a servant in an apothecary shop, and renounced all treatment until the ensuing winter.

"Remarks.—In this case, lepra, and two forms of psoriasis were seen on the body of the same individual. It goes strongly to confirm the opinion which has been previously expressed, that lepra and psoriasis are essentially the same disease. The case is also interesting, as showing the frequent recurrence of the affection, after the skin had apparently regained its normal structure.

"CASE III.—*Psoriasis Inveterata—treatment by the Sulphuret of Antimony—subsequently by the Ointment of Ioduret of Ammonia.*—Barré, forty years of age, a shoemaker, of a feeble constitution, sallow complexion, and of an appearance resembling that of the cretins of Switzerland. His mother had a cutaneous affection, but his father was free of it. His nourishment in early life consisted of pork and vegetables; he had good health until he was eighteen years old, since which he has been much afflicted with intermittent fevers.

"In the spring of 1809, the present disease commenced behind the ears; the desquamations were dry, farinaceous, and accompanied by itching; in the course of a month the whole head was covered by the eruption. He remained in this state four years, during which period he drank habitually an infusion of the water-dock (*Rumex aquatilis*. L.) and abstained from salted food. The disease continued to spread, and a number of patches of psoriasis guttata covered the stomach, breast, and back; these diseased spots were the seat of violent itching. The legs and arms were not much affected.

"In 1817 he entered the Hospital of St. Louis, where the treatment consisted in the administration of Fowler's solution, vapour and simple baths. He remained in the hospital thirteen months, and left it nearly cured.

"Ten months afterwards, the psoriasis re-appeared, and in 1820 he re-entered the hospital. He was under treatment for nine months, and when discharged was well, with the exception of the head.

"In 1828 he again became a patient of St. Louis: no amelioration resulted from the treatment, and he left the institution at the end of seven months. Since that time he has been employed in a stone-quarry, and his nourishment has been tolerably good.

"On the 22nd of October, 1832, he was admitted again into the hospital of St. Louis. The treatment at first consisted in the infusion of succory; subsequently that of hops, con-

joined with pills of the sulphuret of antimony. Of the latter, commencing with one pill a-day, and gradually increasing the dose, he took 63 pills in thirty-four days.

"Dec. 15th. The disease by this treatment was changed in its character; the scales becoming much thicker. The entire scalp is covered by small yellowish scales, which extend over the forehead and temples. On the nape of the neck, and on the back, are twenty patches of various sizes, elevated, red, of a circular form, and covered with light, dry, thin scales. On the breast are two large patches, one of which was cauterised a month ago by the pernitrate of mercury, but the scales have again formed upon the cicatrised surface. Five patches are seen on the abdomen; on the fore-arms several eruptions, originally distinct from each other, have united, and envelop the limb in its entire extent.

"The skin covering these surfaces is raised, red, traversed by numerous transverse furrows, which are again crossed by superficial depressions running longitudinally. From these intersections result small squares, covered by dry, white, thick scales, which are very different in appearance from those of psoriasis diffusa.

"Around the knees, and on the ankles, are depressions analogous to those on the arm, but the elevation of the patches is much less than those of the superior extremities. A large spot of psoriasis occupies the inferior surface of the abdomen, and is seen amidst the hair of the pubis. Every two or three days the patient has four or five alvine discharges, accompanied by slight colic.—Continue pills of the sulphuret of antimony. Infusion of hops; warm bath three times per week.

"Feb. 25th. No very marked melioration has taken place; the only change observed is, that the scales are not so thick as formerly. Frictions to some of the patches with the tartar emetic ointment.—Suspend the antimonial pills.

"28th. The patches of psoriasis, to which the ointment has been applied five times, have become of a deeper red colour, accompanied with great heat and intense itching; minute pustules of the size of a pin's head are seen disseminated over their surface; the scales have become thick, soft, of a yellow colour, resembling the scales of impetigo.

"March 2nd. The pustules have become much larger; scabbing has commenced in the centre. The yellow scales are thicker and larger.

"6th. The scales are more than a line in thickness: they are of various shades of yellow, and are absolutely the same in appearance as the scales of impetigo.

"April 21st. The experiment with the local application not producing any beneficial result, M. Bielt directed the internal use of the tincture of cantharides. The dose was at first small (six drops three times a day), and rapidly increased. This plan of treatment was abandoned a month afterwards, as it caused

nausea and diarrhœa, without producing the slightest change in the diseased surfaces.

"During the summer he became an assistant in the clinical wards, and no active treatment was attempted; occasionally a sulphur bath was directed.

"October 26th. The disease covers the same surfaces it did in the spring; the patches are less elevated; the desquamation not so abundant, and the skin is smoother. Frictions with the ointment of ioduret of ammonia, ℞ss. to be used each day.

"December 28th. *Present state.*—The psoriasis of the arms is much modified in its appearance; the patches are very slightly elevated; they are of a pale red colour, which disappears under the pressure of the finger, and the cracks and furrows formerly observed, have almost entirely disappeared; a slight formation of thin, small and dry scales is still seen. Interspersed amongst these spots are portions of skin, which is not rough, hard, or dry, but which has become soft and pliant; in a word, perfectly healthy.

"The patches of psoriasis of the body have undergone the same alterations as those of the arms; they are less numerous, very slightly elevated, and the desquamation is altogether furfuraceous. None of these spots present the rough cracked appearance which was formerly seen upon their surfaces.

"*Remarks.*—In consequence of leaving Paris I was unable to follow the case to its termination. The disease was evidently nearly cured, and the favourable change dates from the period of the employment of ointment of the ioduret of ammonia.

"The observation presents a well-characterised example of psoriasis inveterata, in which the surface was deeply penetrated by fissures, and in which the scales covering the diseased surfaces were thicker and larger than in the other varieties, and generally quadrangular in their forms."

Several other well-marked cases illustrating the varieties of the disease, are given by Dr. Pennock, but as we have not space to extract the whole, we must conclude with some judicious observations made at the close of his essay. Upon an analysis of a number of cases, he says—

"It is observed that the disease first appeared on the superior and inferior extremities, especially in the vicinity of the articulation, in seven out of ten instances; on the head twice, and once on the scrotum. In every case the disease commenced with the sensation of burning and itching, and the primitive appearance was that of enlarged papillæ, which were soon covered by the formation and exfoliation of minute and dry scales. The papular appearance increased, assumed a form more or less circular, the surface of which did not manifest a central portion of sound skin previous to having been covered by squammæ. The primitive appearance of lepra and the varieties of psoriasis were the same, and, in

two instances, patches of the former were intermixed with those of the latter: these facts coinciding with the observations of pathologists of other countries, warrant the opinion, that the difference of the disease is merely in the form, and that essentially they are but varieties of the same affection.

"In one-fifth of the cases, one of the parents of the patients had had a squamous affection. No facts were presented which induced the idea, that the disease had been the result of contagion. The observations having been confined to persons in the poorer classes of society, no comparison could be instituted between them and those surrounded by more comforts. Most of the patients were persons whose general health, previous to the disease, had been good.

"One of the individuals attributed the origin of the disease to domestic chagrin. It is certainly remarkable, that a moral cause should produce such an effect upon the skin, but similar cases have been frequently remarked. Plumbe relates two highly interesting cases of that character. He remarks, that 'the class of persons who appear to be most subject to it (lepra) are those whose minds are anxiously occupied by the cares of business or study, or who are accustomed to bodily exertion beyond what their strength enables them to bear.'

"Respecting the pathology of these affections, writers are far from being unanimous in their opinions. Alibert observes, with great truth, 'Ce qui deconcerte l'observateur lorsqu'il est à la recherche des causes qui influent sur le développement de l'herpès, c'est de voir, ce genre d'affection se manifester chez des sujets qui jouissent, au moins en apparence, d'une santé parfaite.' Plumbe thinks that the vesicles which secrete the cuticle, are the seat of chronic inflammation, which renders the production of the epidermis more abundant, and causes the exfoliation of the scales. This hypothesis is imperfect, as it does not account for the circular form which the patches of lepra present. M. Rayer attributes the diseased action of the cuticle to the inflammation of the rete-mucosum. In case fifth of the preceding series, this condition of the mucous tissue was observed. How far it had been influenced by the existence of variola the writer is unable to determine.

"This disease presents some peculiarities in the seat which it may occupy, which it is important to notice, but the limits to which this essay is necessarily restricted, prevents the examination of the subject in all its details. The history of these varieties are very satisfactorily given by M. Biett.

"Considering the different forms of lepra and psoriasis as being essentially the same disease, I will not attempt the diagnosis between them. The eminent authors who have written on diseases of the skin have pointed out their differences with great minuteness and precision. The presence of dry scales in this disease is a sufficient character to prevent it

being confounded with the cutaneous affections of the other orders. Sometimes, however, the primitive exfoliation is superseded, or attended by serous or sero-purulent appearances; in this case the presence of vesicles or pustules may be detected on examination, and the scales are not dry, gray, and friable, but are large, soft, and humid concretions of the effused fluids.

“Chronic eczema in some instances presents appearances very similar to psoriasis; this is particularly the case when it affects the head. In this case, although the scales may be dry, yet, upon examination immediately behind the ears, the surface will be found moist, and vesicles are occasionally seen in the vicinity. Psoriasis of the scalp may be distinguished from pityriasis by the thickness of its scales, and by the solid papular indurations, which are more or less prominent.

“Some of the varieties of the syphilides appear at first sight to resemble lepra. The form of these eruptions is round, and presents tubercular elevations of the skin; they are to be distinguished by their livid, copper colour, by the smoothness of the tubercles, which are seldom covered by scales, and in the rare cases in which the exfoliation presents itself, the scales are smaller than the circumscribed induration which they surmount. The diseased skin in the scaly affection of syphilis does not present the dryness and roughness so remarkable in lepra, and the circles of the patches are rarely perfect. Again, the history of the affection and the attendant symptoms will dispel any doubts which may have been entertained.

“*Treatment.*—Pathologists, differing respecting the seat of the disease, present views equally adverse in regard to the treatment. Rayer, founding his opinion on the idea that an inflammation of the rete-mucosum is the pathological state of the skin, recommends venesection and the application of leeches to the diseased parts upon their first appearance. Plumbe, on the contrary, regarding this affection as the result of debility, directs his entire attention ‘to the restoration of the strength of the patient to its original standard, not simply before the cutaneous disease appeared, but even before those habits or pursuits were adopted, which for years may have preceded it.’ Hence he urges the importance of placing the patient under circumstances favourable to the invigoration of the general health. It would seem impossible to lay down any positive and unvarying plan of treatment, occurring as the disease does in the poor, enfeebled by every variety of privation, and in the rich, surrounded by every comfort and luxury; in fact, the practitioner must be directed by his own discrimination.

“The practice of M. Bielt is, if the patient be young and vigorous, the skin inflamed and red, the pulse full and active, to have recourse to venesection, simple baths, diluent drinks, rigid diet, and rest. He disapproves of the

application of leeches as never producing any beneficial effects. In those cases where the patient is old, enfeebled by disease or insufficient nourishment, and where there is not evidence of much inflammatory action, tonics should be administered. At St. Louis, where the class of patients are those who have been subjected to much privation and distress, the practice last mentioned is resorted to, until the state of the system is such as to support active treatment. The external applications in use at that hospital, and which have been attended with useful results, are the various preparations of iodine, combined either with sulphur (grs. xv. to grs. xx. of the proto-ioduret to ℥j. of axunge), or the proto-ioduret of ammonia, combined as mentioned in the first part of this essay. Whilst the patient is on the use of a bitter infusion, generally that of hops, frictions with these ointments are made morning and night on the patches of the eruption. The result with the ointment of the ioduret of ammonia has been previously stated; that with the ioduret of sulphur is such as to warrant the continuance of its use. In a case of psoriasis diffusa, which I have recently had under my charge, the result of the treatment with friction with the ointment of the ioduret of mercury has been very satisfactory. M. Albert used with much success the ointment of the white precipitate of mercury. Plumbe recommends in strong terms the following external application:—℞. Hydrarg. subm., plumb. superacet., āā ℥ss.; Ung. hydrarg., nitrat., ung. cetacei, āā ℥ij. M.

“Baths are of much use in exciting the circulation, in producing a more natural state of the skin, inducing perspiration, and by detaching the scales. They must be directed on the principles previously mentioned, using the simple, emollient, or narcotic baths when much inflammatory action exists, and the more tonic in cases of enfeebled states of the system; sulphurous, sea water, alkaline baths, and those of the preparations of iodine are then considered as most useful.

“Vapour baths, either general or local, are also useful auxiliaries in the treatment of these affections.

“As regards the internal treatment, Bielt places much reliance on purgatives of calomel, either alone or combined with jalap, when administered in the forming stage of the disease. It is found to be particularly valuable in cases of children. He counsels its administration in small in preference to large doses, with the view of producing a slow rather than a sudden change in the system.

“The tincture of cantharides has often produced much beneficial effect in chronic cases, or where the disease has reappeared, or where it exists in persons of enfeebled constitution. His mode of administering this preparation is from three to five drops in a teaspoonful of sweetened water or pisan in the morning previous to eating. The state of the digestive and urinary organs are to be closely attended

to, and if no epigastric pain, nausea, purging, or ardor urinæ should be induced, it may be augmented five or six drops a-day, until twenty-five to thirty drops a-day have been administered. In exceedingly inveterate cases of this disease, all the preceding treatment has been found to fail; in such cases the exhibition of Fowler's and Pearson's solution has succeeded. The commencing dose of Fowler's solution being three drops in some inert vehicle, and gradually augmenting until twenty-five to thirty drops per day have been administered. Pearson's solution, being much weaker, may be given in the dose of a scruple, increasing to half a drachm. The preparation of the arseniate of soda is applicable to women and debilitated persons. In the administration of these remedies, the medical observer should keep constantly in view the injury which the gastrointestinal mucous surfaces may sustain, and cease the exhibition of these preparations upon the slightest manifestation of diseased action.

"M. Biett reports several cases of psoriasis inveterata, where he obtained satisfactory results by the administration of the arseniate of ammonia used in the same doses and under the same circumstances with the arseniate of soda.

"In psoriasis affecting the prepuce, the application of mercurial ointment should be used. In psoriasis scrotalis, fumigation with sulphur or cinnabar is found very efficacious."

A Therapeutic Arrangement and Syllabus of Materia Medica. By JAMES JOHNSTONE, M. D., Physician to the General Hospital, Birmingham. Renshaw.

THE author informs us that the present Syllabus exhibits the order in which medicinal substances are arranged in his lectures in the school of Birmingham. Medicines are classed, in the first part, according to their therapeutic agency; in the second, the animal and vegetable products are arranged according to the systems of Cuvier and Jussieu, and the minerals alphabetically. The reasons for such a division are adverted to—Cuvier and Jussieu's being based upon structure and function; that of Linnæus upon external appearances. Often the most instructive part of a work of this kind is the preface; it is something like the prologue to a play—it presents the motives which incited to its exhibition, the objects it has in view, and gives in perspective a glance of the machinery. We shall, therefore, quote the author's own words, which refer to the workmanship, make a few comments on the execution, and, lastly, present our own views on the mode in which medicaments may be the most appropriately classified, so that the subject may be taught with the least labour, learned with the greatest facility, and with the beneficial advantages which must accrue in its application to the practitioner. In doing so, we shall relieve ourselves from the charge of dictating to a man like the author, by stating

that he is a man versed in physiologic lore; a profound scholar; an excellent physician, we are informed; and, if the address which he delivered last October to the students of the School of Medicine in Birmingham is to be the test, an eloquent and philosophic writer.

"Thus are formed six classes, and these again are divided into orders.

"I have as far as possible adhered to the Cullenian nomenclature, though there will be found a few exceptions to this rule in my tables. Thus, stimulants are divided into three orders; the first of which, namely, secretory stimulants, is new in therapeutics. That it is, however, impossible to dispense with this class, will be at once perceived, by considering the nature of the medicaments which it contains. Mercury is generally allowed to operate upon the whole glandular system. It acts upon the mesenteric glands, upon the liver, &c., and upon the salivary glands; indeed, this last effect is only symptomatic of its general operation. The medicinal action of iodine is not so well understood, but there is reason to suppose that it does not differ widely from mercury. It is said to have proved diuretic in dropsies, and to have removed disease of the liver, while its efficacy in bronchocele has been long ascertained. Iodine also acts upon the salivary glands, for when rubbed on the skin several days together, it becomes perceptible to the taste.

"In my arrangement, sedatives form the first order of medicines which act upon the heart and arteries. I have inserted them in this place, because they perceptibly depress the circulation; nevertheless, I believe sedatives act immediately upon the nervous system, and by their influence upon the nerves of the heart deprive that organ of its irritability or vitality. Hence, the stimulating properties of the blood do not produce their usual effect upon the heart; its contractions are therefore feeble, and the circulation is not carried on with its accustomed vigour. In support of this view of the *modus operandi* of sedatives, it may be remarked that in very large doses most of these medicines are narcotic poisons, thus displaying their powerful influence over the brain and nerves. I have, however, preferred a practical arrangement to one formed entirely on theory; but, as this subject will be farther discussed in my lectures, I now leave the therapeutic arrangement to speak for itself.

"The chemical analyses which will be found in the following pages, are selected from the best authorities I could find; and in the list of medicines I have noticed all the articles of the *Materia Medica* of the London College of Physicians, together with some other substances which have been lately introduced, or are commonly used in practice.

"As many of the most useful medicines are poisonous when administered in large quantity, I have enumerated the principal symptoms which they excite in man, and the morbid appearances which are commonly observed in

those who have fallen victims to their influence. These symptoms and appearances, however, are not invariably the same. In some cases only a few of the symptoms are observable; in others all of them are present, while considerable variety of morbid structure is displayed by dissection."

We regret to be urged to the statement at the outset, that there is frequently a negligence of method; for example, vegetables are placed under Jussieu's natural order, yet we find, under "Leguminosæ," cassia fistula, tamarind, logwood, and gum Arabic, following each other in great confusion. This is a fault, for where is the similarity of medicinal property? But, after all, what human production is faultless? A few such faults we find in the book.

The *modus operandi* of medicines is a subject replete with interest, and its investigation one of vital importance in physiology and medicine. Upon what tissue does a certain medicine operate? upon a mucous tissue, a serous, a muscular, a nervous, &c.? These are questions which could be answered only by the most elaborate physiology. Is it possible to determine such positions? We believe it is. We believe that at some future period the pen of a philosopher will be applied to the subject, when the artificial system of Linnæus—the natural ones of Jussieu and Cuvier, will in the *Materia Medica* be omitted; when we shall have a certain number of medicinal agents acting upon a certain structure predicated—nay, determined with matchless certainty, provable by analogy, and by the completest demonstration.

We recommend to teachers of *Materia Medica*, and to medical students, the little book under notice.

Foreign Medicine.

SELECTION FROM THE CLINICAL LECTURES
DELIVERED IN PARIS.

Review of the Medical Clinics of the Hôtel Dieu during the months of December, 1834, and of January and February, 1835.

CLINIC OF M. CHOMEL.

Typhoidal Fevers.

In all our clinical reviews hitherto published, we have devoted a paragraph to the cases of typhoidal affection occurring in the Hôtel Dieu; but whole columns would not now suffice for the enumeration of those which occurred there within the three months above named; never before did typhoidal affection develop itself in so great a number, never were its symptoms of a more alarming character. Many beds of the clinic were occupied by students in medicine and in law, four among whom died; and those who are now completely convalescent caused us throughout their malady the most anxious inquietude. In

all the fever took its usual course, presenting no differences sufficiently marked to note, except in two instances, one of whom, during the first days of the fever, became completely dumb, yet his intelligence lost none of its activity, nor were the rest of the symptoms otherwise of a more alarming character. The loss of speech in affections of this kind, the ancients were wont to consider as a very bad augury, and we ourselves have once been enabled to verify the observation; but in the present case the augury proved false, as the young man is now completely restored to health, and there remains not the slightest embarrassment in his speech.

In the second instance the termination was fatal; epileptic accesses aggravating every symptom of the fever, set at nought the combined efforts of the most skilful treatment.

Such is the reigning versatility of opinion as to the proper means of combating with typhoidal affection, that scarcely dare we venture on the question. Our readers may perhaps recal the proofs we were wont to adduce in favour of purgatives; but we shall take care how we labour that point any more, the number of cures now performed by that medication being ever reduced to a mere speck, so we must look elsewhere for our therapeutic resources. Is then the medical policy changed? The question is not always so easily answered. Be that as it may, we now see the success of large doses of musk in desperate cases. To a young student in the Hall of St. Madeleine, suffering under typhoidal affection, and almost at the point of death, we saw twelve grains of musk administered in potion and as lavement, as the case required, and in the course of a few days he was in a convalescent state.

M. Chomel, whose experience, especially in typhoidal fever, we may well be permitted to quote, has, in his oral instructions, ever dwelt particularly on the efficaciousness of musk administered in the last extremity of that malady, particularly when it presented itself under an ataxic form. The same practitioner, after having abandoned for a time the use of chloride in typhoidal cases, has again had recourse to it, and the comparative advantages of these two therapeutic agents are, it seems, at present numerically in favour of chloride. But we shall attentively heed the course of experiments to which M. Chomel is now devoting himself, and shall fail not to communicate their result to our readers.

In the beginning of typhoidal attacks, vomits are sometimes beneficial, but under certain indications only, and we could cite several facts in their favour: when, for example, the usual symptoms of the fever are accompanied by what the ancients called a *saburral* state of the primæ viæ, intense cephalalgia, extreme muscular prostration, diarrhœa, abdominal pains, especially in the right iliac cavity, dryness and discoloration of the tongue, nausea and bilious retchings, then may a salutary result

be expected from the administration of vomits; but when the fever develops itself in a plethoric subject, with intense phlogosis, bleeding and a treatment wholly antiphlogistic is necessary. And here a question of great therapeutic interest arises.—Ought this debilitating course to be continued when the patient falls into a state of adynamia? We think not, however seducing may be the theory intended to prove that this sinking of the powers is the consequence of a surcharge of energy: facts are stubborn, and experience demonstrates that at such periods, in all acute maladies, tonics should be administered; and in the typhoidal state, quinquina should have the preference for two reasons,—its tonic action is the most powerful, and its efficacy in intermittents is well known. Now, as it not unfrequently happens that typhoidal fever takes, if not an intermittent, a decidedly remittent character, the beneficial effect of quinquina may be easily foreseen. Musk with quinquina may be administered when the malady takes the ataxo-dynamic form. But of one fact we must never lose sight, namely, the impossibility of dictating unvarying therapeutic rules; choice and decision can arise only by the bedside of the patient. How, in truth, *à priori*, can every motive, major and minor, directing to this or to that mode of treatment, be specified?

Catarrhal Affections.

The winter has left its quota of catarrhal affections in every possible variety of form. Without entering into their history, which would oblige us to stretch beyond due limits, we shall endeavour to give their principal therapeutic indications. In bronchial catarrh, the form of the expectoration for the most part indicates the medication; if it be pearly, the cough frequent, the fever violent, antiphlogistics, mucilaginous drinks and diet, are always successful. These catarrhs are sometimes accompanied by a slightly nervous trepidation, which a few doses of gum ammoniac and assafœtida will calm or entirely dispel. But the worst and most complicated form of bronchial catarrh is the intermittent asthmatic form. We have seen it in many cases resist with desperate obstinacy every mode of treatment; alkalis with antispasmodics appear to give the most relief; if there be an abundant aqueous and frothy secretion, with dyspnoea, fever, and want of sleep, opiates administered under different forms are really beneficial, and applied several times along the course of the pneumo-gastric nerves, have sufficed to abate the symptoms of imminent suffocation; of this fact, M. Trousseau has cited some instances in his clinical lectures.

For mucoso-puriform secretions of the bronchia, the efficaciousness of balsams has long been known; copaiba, administered with that view, has occasionally proved perfectly successful. This medicament, it is now well ascertained, has a special action on the mucus

of the genito-urinary passages, whilst balsam of Tolu exerts a modifying influence on the secretion of the mucus of the bronchia, and is therefore in constant use in catarrhs with puriform expectoration, and ever with the most favourable result; indeed all the resinous compositions have very nearly the same property. After prolonged usage of these preparations, a nettle-rash eruption not unfrequently appears all over the skin; but this exanthema is almost always coincident with the cessation of catarrhal symptoms. Finally, we must observe, that catarrhs are sometimes vicegerent of other secretions; they are found to supervene on the suppression of an habitual flux, or immediately after the disappearance of an eruption from the skin; in such cases, the most judicious practice is to recal the eruption by sulphureous baths, the utility of which for such purpose is too evident to need a comment; they act, we think, by determining new eruptions to the skin, or in re-establishing the functions of that organ.

The catarrh we most frequently observed during the winter months was the chronic pulmonary catarrh; it may be accompanied by pulmonary emphysema and bronchial dilatation. Auscultation and percussion will give the signs necessary to detect these complications—the peculiar sounds of the voice, the resonance of the thoracic walls, and a harsh inspiratory murmur.

Angina of the Chest—Maladies of the Heart.

Singular confusion and very evident contradictions characterise the greater number of medical works on the seat and issue of inflammation of the chest. We are therefore disposed to register every fact which may tend to throw some light on the matter. A case in point presented itself to our observation during the winter; and its necroscopic result seems to confirm the opinion of Farry, who compares the symptoms of inflammation of the chest to organic affection of the heart, or of its large vessels. The patient to whom we allude occupied No. 28, in the Hall of Sainte Madeleine.

At the time of her admission into the Hôtel Dieu she had been indisposed about two months; her pulse was regular; but a few days previously to that period she had complained of excessive pain in the left side of the chest, extending itself to the arm, with violent palpitations and sensations of suffocation. This access recurred twice at different intervals. This day, Feb. 3, her state is the following:—

Extremities cold, of deep violet hue; pulse very small; respiration anxious; suffocation imminent; abundant vomitings of greenish matter; copious expectorations of sanguinolent mucosities; pain in the arm and the left side of the chest. By the use of the stethoscope, at the lower part of the chest a loud crepitous rattle is distinctly heard, and on the upper part the sonorous sound emitted is extremely loud. In the right scapular region there is no respiratory sound; and the sound which

percussion gives is not dead. Be it observed, that this circumstance is not rare, when a tumour developed in the chest presses a bronchial tube and opposes the entrance of air into the aerial vesicles; these morbid symptoms increased to intensity the following day; a large blister was applied to the chest with an infusion of polygala; but the patient expired about five in the afternoon.

Autopsy.—The heart of greater bulk than in its normal state; dilatation of the left ventricle of about two-fifths of its ordinary capacity, and at its base were found amber-coloured fibrinous clots, the most eccentric of which adhered to the coats of the ventricle. The apex of the ventricle was filled with a kind of bloody clot, which contained a few drops of pus. At the origin of the aorta an aneurism the size of a pigeon's egg, contained clots of blood, and communicated with the artery by a circular opening of sufficient diameter to admit the little finger; no appreciable alteration in the rest of the organs.

In the recapitulation of the principal symptoms of this malady we find the characters of angina of the chest; but the organic alterations found after death are far from conformable to the cadaverous results described by certain writers on that affection. To inflammation of the bronchia, Selle attributes the functional disorders which appear in angina of the chest, whilst a more recent author avers that they arise from affections of the nerves of the cardiac and pulmonary plexi. Nothing of this could we find in the subject under consideration; other organic lesions very appreciable could not have escaped the most careless observer. But can these lesions, by themselves, enable us to account for all the morbid appearances of angina of the chest? We think not, because many circumstances in the development and succession of the symptoms of that malady tend to assimilate it to neuralgia. At any rate we are obliged to grant, without the power of determining the point of difference between them, that organic lesion of the heart or of the aorta often coincides with angina of the chest. Three facts of the kind were some years ago collected by M. Genest at the clinic of the Hôtel Dieu, the most remarkable of which was that of a woman, 35 years of age, who having died the victim of angina of the chest, presented a complete ossification of the thoracic aorta; the other two subjects, aneurism of that artery.

In these cases, when the aneurismal tumour is situated on the course of the veins, the nerves, or the trachea, certain signs arise by which the diagnostic is rendered more easy. Thus, if it touch upon a branch of nerve the ramifications of which spread over the arm, a difference in the sensation and motion of the arm, more or less profound, will arise; if upon a vein of considerable calibre, so as to interrupt the flow of the blood in various parts of the trunk, or of the members, bluish cords may be remarked forming multiplied anasto-

moses; the result of the stagnation of the fluids in their conduits. Finally, if the aneurism press on the trachea, or on a bronchial tube of considerable diameter, disorder in the respiratory function more or less appreciable will ensue.

Two other patients presented to us symptoms of disease of the heart, one of whom, a woman, 58 years of age, had been suffering from oppression on the chest for two years. Her lips were tumefied, and the base of each lung gave, on auscultation, a half crepitating râle; but she had never experienced the slightest palpitation. Nevertheless, the symptoms, collectively, left no doubt of the existence of organic affection of the heart; the œdematic state of the lower members; the oppression of the præcordial region; the œdema of the base of the lungs, and difficulty of breathing, all indicated that the malady was in the central organ of circulation. The hand, placed on the region of the heart, received no impulsion; but this is not rare in hypertrophy of long standing. But the peculiarity most remarkable in this case was, that the pulse continued large, hard, and vibrating to the last period of the malady; and that autopsy presented to us considerable contraction of the aorta, with ossification and shrinking of its valves. The left ventricle was exceedingly hypertrophied, and the walls of the right much thicker than natural.

Such anatomical disorders rarely coincide with such functional alterations; and it is precisely on this pathological discordance that the interest of the case rests. Auscultation had rendered no particular sound, so that it was impossible to determine, during life, the nature and the seat of the anatomical lesion.

The second case was that of a servant in the Hôtel Dieu, who suddenly, and without any appreciable cause, was seized by extreme dyspnoea, and with such irregularity in the circulation, that the pulsations of the radial artery gave, in their number and intermittence, extreme differences; the lower members were œdematous, and her whole appearance indicated organic affection of the heart. Nevertheless, no morbid signs were heard, either by percussion or the stethoscope, which left much doubt as to the nature of the affection. The irregularity of the pulse might be accounted for; but how was to be explained the instantaneous disorder in the circulation? M. Chomel suspected rupture of the valves or the tendons of the heart. However that may be, repose, diet, and frequent sanguine evacuations, restored the woman to health; her pulse became regular, the oppression ceased, and the œdema of the legs completely disappeared.

Profuse Hæmoptysis in the last stage of Phthisis Pulmonalis.

Very abundant hæmoptysis is rare among the phthisical who touch upon the fatal termination of their malady. When an individual of tuberculous habit expectorates blood, it is to be presumed that the tubercles developed in

the parenchyma, are yet in their crude state, or only beginning to soften; but this is true only in general, for we often find slight hæmorrhage with tuberculous suppuraction of the organs of respiration: then, however, there is reason to believe that bleeding has taken place in that part of the lungs where the disorganisation is little advanced. Experience demonstrates that when hæmoptysia begins at an advanced period of phthisis, it is seldom fatal.

A patient in the Hall of Sainte Madeleine was seized with an excessive disgorging of blood; he was then in the third stage of tuberculous phthisis. His state of extreme exhaustion, pale visage, depressed pulse, and the cold sweat which covered the extremities, announced that death was fast approaching. He was bled, cupped, leeches applied to the chest, and a decoction of rhatania administered internally; still the disgorging continued. M. Chowel then applied a large blister to the bottom of the chest, which had already succeeded in cases of the same kind, and whether owing solely to the action of the blister, we do not affirm, but the hæmoptysia ceased as the blister began to act.

Cancerous Affection of the Uterus.

A woman died in the Hall of the Clinic with every symptom of cancerous affection of the uterus. On examination it was found that the coats of the vagina in proximity with the neck of the womb, partook the cancerous affection, but the mucous membrane of the vagina was the principal seat of the complaint. The body of the uterus was totally obliterated, and in the place which it ought to have occupied, were two little tumours about the size of a nut, bearing no anatomical resemblance to the ovaria, but as those organs were altogether wanting, it is to be supposed that they have been altogether destroyed by scirrhus disease. But the most remarkable point of the case is the total disappearance of the body of the uterus. We know not whether the records of medical science can produce a parallel case; atrophy of the mammary gland from cancerous ulceration of the mamma is, on the contrary, sufficiently frequent.

During the night of the 12th January, a female was brought into the Hôtel Dieu, suffering excruciating agony in the right hypochondria; her skin and sclerotica of a deep jaundice hue, agitation excessive and continued, and vomiting floods of bile. Leeches in great numbers were applied to the region of the liver, but to no purpose; she died.

Autopsy.—The liver, considerably increased in bulk, adhered in places to the stomach and to the duodenum; the ductus communis choledochus, for about an inch in its course, was obstructed by a tumour as large as a nut, containing a biliary calculus; above the obstruction there was some dilatation of the jejunum; the ramifications of the hepatic duct very much dilated, and on slicing the liver there exuded from the parenchyma a brownish matter,

mixed with little concrete granulations; in divers points of its tissue collections of purulent liquid, or of natural bile; the hepatic organ, of anomalous yellowness, was ulcerated in the internal coats of the dilated conduit, doubtless by the presence and continuance of the calculus.

Hepatic colic arising from calculi in the biliary conduits, will, we know, cause intolerable pain, but seldom occasions death. In a general way, after hours of agony, gravel is rendered either by vomit or stool, and all symptoms dissipate, to re-appear at intervals more or less distant: vegetable diet and appropriate medication may prevent relapse. But the case in question was hopeless; the calculus being too large to pass through its duct, and fall into the duodenum, or find a passage through the common united duct.

In the Hall of Saint Lazare, a woman, without the slightest puerperal tendency, was attacked with phlegmasia dolens; the left foot, calf and thigh were considerably swelled and thickened; the slightest pressure on the limb was painful, and its movements embarrassed; no fever; good appetite; nothing remarkable in the feces or in the urine, but the courses had not appeared for six months. On exploration, the womb was found very small, and its cavity firmly closed; no thickening or tumour in the pelvis; nothing to create suspicion of malady in the ovaria, and no obstacle in the rectum. A purgative was administered, and the courses re-appeared and flowed twenty-four hours. After the lapse of several days another purgative was given, and she recovered. Now what share had the phlebitis of the uterus, or inflammation of the lymphatics in the development of this malady?

HÔPITAL DE LA CHARITÉ.

CLINIC OF M. VELPEAU.

Abscess in the Sub-Hyoidean Region—Operation.

BY M. AD. BERIGNY, M.D.

In the men's hall, No. 5, lies a patient, who entered March 21. He had been a public crier for five years, and was of a tolerably robust constitution, subject, however, to frequent maladies of the throat, which would come and go suddenly; these attacks ever left him without the power of swallowing, coughing, or even of spitting. After crying for some hours he was almost always hoarse, and had been from the age of twenty much troubled with a thickness in his voice.

On the 9th March he carried a very heavy load on his head for an hour and a half, and during his passage he felt a cracking sensation in the sub-sternal fossa, and this he says was the origin of his malady. Twelve days subsequently to this accident he entered La Charité, ten leeches and mustard fomentations having been applied to his throat the previous day.

On the 21st he was bled by the assistant, and on the 22nd we found his state as follows:—

A puriform, almost compact swelling, the larger extremity of which occupied the sub-hyoidean region, the lesser extended to that which is above it; laterally its extension was from the left portion of the thyroid cartilage to the right sterno-cleoido mastoid muscle, which it raised a little; the skin not sensibly changed in colour, except in the centre to a small extent, and slightly erysipelatous about two inches above the sternum. The interior of the mouth offered no corroborative symptoms of the malady, nothing in the amygdalæ, nor in the superior part of the larynx.

Here, then, observed M. Velpeau, is a case which cannot be mistaken; a distension purely mechanical, and a goitre with pain and redness, and sudden increase in size, are two distinct things. To the touch there was no fluctuation, but the pressure of the finger left a white mark, which the sanguine reaction instantly effaced, proved the œdematous state of the tissues. This sign is in general, says M. Velpeau, very emphatic, being a certain characteristic of a deeply seated abscess; there was no pulsation, no shootings, but a sensation of pricking in the neck; margin of the tongue rather red; pulse not sensibly developed.—Treatment, gum-water, cataplasm.

23rd. Much hoarser; swallows with great difficulty; coughs a little, and has a tickling in the throat; the tumour far more sensible to the touch; scarcely slept during the night, but no fever. Same treatment.

24th. Exacerbation of the foregoing symptoms; tumour rather enlarged but not increased in bulk, as hard as at first, but very sensitive; the skin rather redder, but not thinned.

M. Velpeau now proposed to open the tumour on the following day; it being, as he believed, situated under the cervical aponeurosis, it was to be feared that the pus might make its way into the tracheal artery, and consequently suffocate the patient, or it might flow into the chest.

25th. No sleep throughout the night; thirst excessive; liquid stopped in the larynx by thick mucosities, which he vainly tried to expectorate; respiration difficult; pulse developed; tumour increased in size; in short, a purulent collection being very manifest, an incision, half an inch long, extending a few lines to the outer part of the right of the thyroid cartilage, and below the thyroid gland, was made, with all the minute precautions necessary in so difficult and complicated a region.

The result confirmed the diagnostic. The point of the bistoury having reached the tumour, on strong pressure there issued from the opening a great quantity of pus, and of a thickness to prove that it resulted from the disorganisation of the cellular tissue between the layers of the cervical aponeurosis. In a

few minutes afterwards all sense of oppression had ceased, and the following day he was better; the redness and thickness of the integuments much lessened.

Four days afterwards the patient requested his dismissal from the hospital, which was granted conditionally, that he would from time to time present himself at the hospital, as the wound, though in fine condition, was not yet closed, and there was some induration.

This case is one, among others, that demonstrates how many difficulties beset certain pathologic affections; for when the observer has duly considered, weighed, and appreciated the various phenomena passing under his immediate eye, he finds himself very little assisted by it. The causes, for example, of the malady in question, antecedent and predisposing, the great number of angina the patient had suffered, his vocation as public crier, his frequent hoarseness and habit of chewing tobacco, are causes more than enough to account for an abscess symptomatic of an affection of the larynx, and the more emphatically so, since there was but one determinant point on which to rest suspicion of an idiopathic abscess, namely, the cracking sensation which he felt in the sub-sternal fossa, which M. Velpeau attributes to rupture of the tissue.

Unfortunately the diagnostic throws but little light on the matter; it simply indicates a deeply-seated sub-aponeurotic tumour; for there was no manifest fluctuation, no shootings, no prominence of the skin, nor any indication to warrant a surgeon in forming a true diagnosis.

The therapeutics in such cases must be prompt and decisive,—incision or caustic; for, independently of the general accidents which such a tumour might cause, situated over a cavity, was the imminent risk, as before observed, of suffocation to the patient should the pus make its way to the larynx or into the chest; and of this we have had one fatal example. Experience has now determined the true use and import of the operation by caustics, rarely now applied but to integuments irrecoverably disorganised.

As the exact depth of the tumour cannot be accurately ascertained, there is great risk in the application of caustics; a very little too much may reach the tracheal artery, as in the case of J. L. Petit, which nearly resembled the one in question. M. Velpeau therefore operated with the bistoury, and by that very means was enabled to judge from the nature of the pus that the lesion was circumscribed to the inter-aponeurotic cellular tissue, as before described.

THE
London Medical and Surgical Journal.
Saturday, May 9, 1835.

NEW REGULATIONS OF THE APOTHECARIES' COMPANY.

"Double, double,
Toil and trouble."

Witch Scene, Macbeth.

A DOCUMENT, which has been issued by the Society of Apothecaries in the course of last week, and to which our observation has been directed, demands the attention of every one either teaching or studying medicine. Those also about entering on their career in our profession, as well as their advisers, are especially interested in its import.

The document to which we allude commences with an expression of satisfaction on the side of the Court of Examiners, that the plans they have hitherto promulgated have been productive of much benefit to the medical world and the public, owing to the more extensive acquirements possessed by candidates for their license, and declaring that the enlarged curriculum demanded by their present regulations will be the utmost extent to which they intend going in the way of improvement, a few modifications in points of detail excepted.

We understand that the term of study is prolonged to an additional winter. The subjects for study are also allotted to each session in a manner more appropriate than heretofore, and the crowding, so much complained of, and its effects avoided. The attendance on hospital medical practice, the Court adds, although extended from twelve to eighteen months, will not occasion any additional expense, as the Hospital Physicians have liberally agreed to allow such privilege without

extracting an increased fee. Query: will the Lecturers *decrease their fees?*

In bringing forward this new curriculum, the Court of Examiners announce that the public good, and the feeling of the profession generally, have been consulted. The distribution of the studies into different sessions, winter and summer, they consider to have been long and imperatively called for. They also, after bestowing due praise on the liberality of the Physicians of the London Hospitals for their prompt compliance with the views entertained, recommend them to re-organise their respective out-patient establishments, so that the student may have an opportunity of observing those numerous and important classes of disease, which, according to the system now pursued, are to them as a sealed book. The utility of periodic examinations is also strongly impressed on the Teachers, and the use of a class-book for each branch of study, on the student.

The Examiners add, in a tone which seems to bewail the necessity of a five years' apprenticeship, their advice, that the fulfilment of their curriculum should take place during this period, so that the candidate might, at the expiration of his time, be eligible for examination. Parents and guardians are also exhorted to give a sound preliminary education to young men intended for the medical profession; including a good classical groundwork, the rudiments of the mathematics, natural philosophy, and the French and German languages. The age at which the apprenticeship should commence is recommended to be about seventeen years. A clause provides, moreover, that the examination of the candidate in Latin Medical Classics may be permitted, at his option, either at the time of his first registration, or when his studies are com-

pleted. Now we have cause to believe that these, together with an increase of the number of lectures, actual dissection of the human body, and recognition of foreign certificates by the Court, are the principal features in this last list of regulations.

Numerous as have been the manifestos issued from Apothecaries' Hall during their reign of twenty years, it seems this is to be the final broadside; and it must be confessed they have loaded their guns well. Let the College of Surgeons arise in wrath or hide its diminished head, and that of Physicians gaze in astonishment at the deeds of its once puny, but now sturdy and giant-limbed rival. "*Crescit eundo*" should be the motto of the latter, while the former, wrapped closely in the night-gown of indolence, and reposing on the deceitful cushion of fancied security, might find theirs in the effigies of a sloth about to take his unwilling and painful jump from the summit of a tree, the leafless branches of which declare, in their nakedness, that the despoiler has stripped them effectually. Verily the Company of Apothecaries are sustaining their mingled and discrepant offices bravely. With one hand they compete with and buffet the race of druggists, while with the other they dispense licenses to practice, possessing all the *real* efficacy of those conferred by the College of Physicians. One eye is fixed steadfastly on the substantial profits of trade, while the other is as widely open to the interests arising from a more scientific mode of money-getting.

Seriously, however, it is interesting to note the progress this body has made in the medical world. Commencing at the conclusion of the late war it has warily, *vulpi similis*, wended its track onward. Argus-like, it has had eyes behind and before; at all events, its watchfulness to

seize every advantage perceptible to the most microscopic scrutiny warrants that conclusion. Argus-like, we say,—it has been wide awake and on the alert for twenty years. At first, the Company introduced a more systematic mode of education among general practitioners than the latter had any notion of before. They compelled those who, anterior to the period of their power, were satisfied with attending a course or two of anatomical lectures and one on surgery, and a few months' desultory hopping through the wards of an hospital, which constituted the sum total of their medical education, to follow a more defined and enlarged plan. Attendance on medical practice, which before was little thought of, was insisted on, and an acquaintance with the physician's department made a *sine qua non* for examination. The first Court of Examiners were sensible of the inefficiency of the old system (if system that could be called which had neither method nor order), but nevertheless trod cautiously in advance, and, step by step, they ultimately succeeded in laying upon the shoulders of the student an increase of labour, which, had the experiment been attempted suddenly, would not have been borne.

It must be plain to all who give themselves the trouble to think, that the demand for increased qualifications in the student will require for its satisfaction a larger period than the former sessions afforded for study. The addition, therefore, of two summer sessions, lasting three months each, and devoted to botany, midwifery, forensic medicine, and the medical practice of an hospital, together with an additional winter course of six months for dissections, principles and practice of medicine, attendance on obstetric cases, and medical practice, cannot be considered as too much; and the expense incurred by

the imposition of the extra lectures, we are of opinion, will not militate against the *respectability* of the profession, whatever it may do against the *financial resources* of the young professional aspirant.

We perceive that the Court of Examiners require, during the third winter, attendance on *cases* in midwifery. It does not appear, however, that they intend examining into the manual exercise of this art, their inquiry on that head being restricted to the *diseases* of puerperal women and of infants. Now we think the Court might have gone a little farther without at all derogating from its dignity. Certainly nothing can be more absurd than the repudiation of obstetric by all our examining institutions. Two of them require certificates of attendance on midwifery lectures, yet, in spite of this tacit acknowledgment of the necessity of the student's being qualified to attend obstetric cases, they refuse to examine into his capability. Surely the function of parturition is one of first-rate consequence in the animal economy. It involves the lives of two, and often more; and upon its proper or improper treatment depend those lives. The act of parturition, as society is now constituted, is often surrounded with difficulties and dangers which call for the exercise of the keenest sagacity on the part of the medical attendant. His knowledge of anatomy and physiology may, in a case of midwifery, be taxed thoroughly; so may his acquaintance with various remedies and appliances which our science teaches for the cure, as well as prevention, of disease; and is it rational that a portion of our education so essential as this is, should be neglected or slurred over without examination, or left to the conscience of the student? Most assuredly the public have as much right to be protected against

ignorance in this, as in any other department of our art. Indeed, we hope soon to find that such will be the case; and that a scrutiny into the obstetric acquirements of the candidate will be instituted whenever and wherever diplomas or licenses to deal with the public health are granted,—an examination, not stopping at an inquiry into the diseases of pregnancy and of infants, but taking into its scope the manual dexterity and professional resources of the examinee in times of difficulty.

The permission to undergo his examination in the medical classics at his first registration, or commencement of his studies, we regard as a proof of considerate wisdom, and highly advantageous to the student. His Latin lore, if he has had a liberal education, will then be fresh in his memory, and one source of anxiety and fear, one incubus, at least, weighing on his tranquillity, be removed. Having passed the ordeal of the medico-classical pedagogue, he will have one bugbear less to contend with. One phantom withdrawn from haunting his calculation of a final and successful examination.

One more sign of the times. The certificates given by the medical professors in the continental universities are also received and recognised by the Court of Examiners.

The Company of Apothecaries have at last, then, achieved their utmost wishes, and conclude with this manifesto their daring labours. They have rolled their stone, which gathered bulk as it progressed, to its resting place. Like Sisyphus of old, if we believe them,

“With many a grunt, and many a groan,
Up a high hill they've heaved a huge round
stone.”

But our contemporary of the *Lancet* sings prophetically

"THAT huge round stone, resulting with a bound,
Shall, downwards thundering, smoke along
the ground."

On this piece of prophecy we shall not pretend to descant, but return to our prose.

There are, then, to be no more "last words" uttered by the oracles of Apothecaries' Hall. So be it, for most assuredly the prolixity of this latest specimen of their eloquence needs not a repetition. What with their new regulations and *their exceptions*—what with their subsequent upon subsequent, and racy foot-*notes*—this, their *Io pæan*, bids fair to become about as abstruse a point of study to the pupil, as any of the numerous studies it enjoins. The sage advice to parents and guardians, too, mixed up with the interminable list of conditions and sub-conditions, is admirable and unique, as are also the sly hits here and there dealt to masters, with regard to the duties incumbent on them towards their pupils, and about which we may say something in our next. Taken altogether, it is an especial manifesto, and "we shall not look upon its like again," we hope, in a hurry, at all events. One regret we feel, why was not this ordinance, this last of its respectable brood, this *ne plus ultra* of refinement, and *ultima thule* of improvement,—why was not this eventful babe clothed in a Roman toga? Why, we ask, was not language so perspicuous and clear dignified by being *done* into Latin, after the fashion of that illustrious prototype for all that is energetic and elegant, the College of Physicians? A great oversight this of its parents, we presume; but we are grateful for any thing in the *shape* of an improvement in the present state of medical education, no matter whence it comes, from the east or from the west, from Blackfriars or Pall Mall. "*Tros*

Tyriusve (nobis) nullo discrimine habetur."

Our party is the profession in general; we believe the advancement of our science to be a universal interest, and we trust it will be a universal aim.

EMIGRATION—MEDICAL SUPERINTENDENT.

It gives us pleasure to state, as we have already advocated a better system of medical treatment for emigrants than it has hitherto been the practice to allot them, that the Emigration Committee have, in the last instance of a ship being despatched with emigrants to Australia, appointed, according to our suggestion, the Surgeon to the office of Superintendent likewise, thereby insuring to the passengers that comfort and safety, so far as health is concerned, which, in so long a voyage, they unquestionably require. We hope the example will be followed.

ROYAL INSTITUTION.

April 10th and May 1st, 1835.

DR. LARDNER ON COMETS.

The long expected lecture on the Cometic System was commenced on the 10th of April, but the subject proving too extensive to be dealt with in the course of one evening, was adjourned until May 1st, when it was duly completed. The attendance on both nights was very full, every part of the theatre being crowded: the matter of the lectures and the manner in which they were delivered, appeared to give universal satisfaction. The style was clear and perfectly intelligible, the language forcible, and divested of technicalities as much as the subject would allow.

Dr. Lardner prefaced his observations on the cometic apparatus by some remarks on the planetary system, which were intended to render the succeeding observations on comets more easily understood. After a short notice of the astronomers who preceded Kepler, he directed the attention of his audience to the investigations of Kepler concerning the planet Mars. These were conducted with the view of ascertaining more correctly the orbit in which the planet revolved. Hitherto it had been considered a circle, but after considerable examination of the subject Kepler found himself obliged to abandon that opinion, and con-

clude that the orbit of the planet Mars, and, by analogy, those also of the other planets, was more or less of an oval, or an ellipse. This doctrine was accounted for by Newton, in the commencement of his "Principia," by the statement, that the attraction of a planet diminishes inversely to the square of the distance. It is not absolutely necessary that the orbit of a planet should be an oval, but it must be one of the class of which the oval is an example, the conic section: viz.,—the parabola, a converging straight line; the hyperbola, a diverging straight line; and the ellipse; the latter having the character of periodicity. A body, therefore, moving in either the parabola or hyperbola would describe the curve once and for all; moving in an ellipse would describe it again and again. The oval character of an ellipse is an accident arising from the velocity with which the body was originally impelled; had it been more or less intense, it might have gone off into the parabola or hyperbola, into immeasurable space.

Comets differ from planets as much as they can consistently with the laws of nature. The orbits of planets are nearly circular: those of the comets are nearly elliptical; but this is not to be considered as a peculiar character, inasmuch as some are nearly circular, and, indeed, they vary in every possible degree. Planets have a certain plane of preference in which they move, which is not the case with comets: as many move at right angles with the ecliptic as within it; they break through all regularity and are a sort of *physical vagabonds*. All planets revolve in the same direction: comets do not obey the same rule, for it is a very curious fact, that of 137 comets whose course has been recorded, 69 have moved one way, 68 the other—very near the casting vote; and it is very possible that the next will equalise the affair.

There are certain peculiar circumstances attending the orbits of planets, which become distinctive marks in investigating nature, which the comets do not possess. The orbit of a planet being nearly circular, and the earth within it, although not exactly in the centre, the planets can be seen *at one time or another* in every part of its course, so that there can exist no doubt of its identity. Some have, in addition, certain personal indications, such as the Belt of Jupiter, the Ring of Saturn, &c.

A comet is either vapour, or else is so enveloped in it, that its features are nearly masked from view; it sometimes has a tail, at others it has none; it varies also considerably in length in the course of a few days, even while in view, so that it may be termed a sort of *astronomical thief*, assuming all shapes to prevent its being identified. In order to discover it, therefore, we must apply the means which are adopted by thief-catchers; we must discover its haunts and places of resort, and in this way trace its course. But here a serious difficulty interposes. The only

part of its course in which a comet is visible, is when it approaches the sun; and the curve described by this part exactly resembles that of each of the conic sections, so that, taking that small portion as a guide, it would be impossible to say whether the path of the comet were an ellipse, a parabola, or a hyperbola. There is, then, only one means left of settling the question, and that is the attribute of periodicity. If the path be either a parabola or a hyperbola, the comet will shoot off into space, and leave the system altogether; so that if it should return, it becomes certain that the course is an ellipse, that alone possessing the attribute of periodicity.

There is not any difficulty in ascertaining their length, magnitude, &c.; for instance, if a comet require the same time to go round the sun which the planet Herschel does, we can calculate its length by the orbit of Herschel.

Halley, who was a contemporary of Newton, and one of the first and greatest cometographers, examined very attentively the observations which had been made on comets appearing previous to 1700. Four hundred and twenty-five comets had made their appearance, and had been distinctly recorded in history; of these only four and twenty had been so carefully observed, that their position, changes, &c., had been noted from day to day, and hour to hour. These Halley took as the bases of his observations, and from the records which had been left, he computed their course—a task of great labour and difficulty. During this time, it occurred to him that some of these accounts might be only returns of the same comet; the only means by which he could ascertain this, was to compare the track the comet pursued through space, and thus prove its identity. By following this course, Halley found that the great comet which he had observed and noted in 1682, followed the same track with one which had appeared in 1607, in nearly all its particulars, moving therefore in an ellipse of about seventy-five years, its orbit extending about three thousand five hundred millions of miles. By tracing back the records of comets for that period of time, he found that a comet, corresponding in all particulars, had been seen in the year 1531, and again seventy-six years previously, in the year 1456. A little doubt arose in consequence of some slight deviation in time, and also in the track pursued by the comet, but these variations Halley, as a conjecture merely, ascribed to the attraction of the great masses of the planets Jupiter and Saturn. It is impossible for us now duly to appreciate the great value of this (at the time extraordinary) conception, as we now fully admit the doctrine of attraction. Halley therefore predicted that the next return of this comet would take place about the year 1768 or 1769, and with a patriotism truly remarkable, warned the world to remember that this prediction was made by an Englishman.

Meanwhile, as time rolled on, great dis-

coveries were made in the physical sciences and in analytical discovery, but yet Newton's doctrines, as developed in his *Principia*, were not fully received, and the expected return of this comet was therefore made the *experimentum crucis*. A question of considerable importance remained still to be set at rest. In fixing the time of its reappearance, Halley had not sufficiently allowed for the gravitation induced by those great masses already alluded to; but the immense labour attending the calculation for a long while deterred astronomers and mathematicians from attempting its solution.

Within a year of its expected return, Lalande proposed to Clairault to undertake the calculation of the comet, in order to ascertain how far its return would be affected by the attraction exercised by Saturn and Jupiter. Clairault, unassisted, shrunk from the undertaking, on account of the vast extent of labour necessary to solve the problem. The task was therefore divided; Clairault, who was an excellent mathematician, undertook that branch of the question, and Lalande assumed the management of the astronomical and arithmetical department. In this work he received great assistance from Madame Lepante.

In order to give an idea of the great labour thus incurred by these three individuals, in order to settle a most important scientific question, it may be observed, that, unlike a planet, for which one calculation is sufficient, every single degree of the cometary orbit must be calculated separately, fresh figures being required for each. They were occupied from morning to night, not even excepting the periods of their meals, for six months, in going through this arithmetical labour. The result of their calculations, as presented to the Academy, at first, fixed the 14th of April, 1759, as the period at which the comet would be in its perihelion, but Clairault afterwards corrected it on completing his inquiry, and stated that it would be at its nearest point to the sun on the 4th of April.

In alluding to the intense anxiety experienced by astronomers for the appearance of this comet, Voltaire said that in the beginning of the year 1759, "*les astronomes ne se couchaient pas.*" Messier, an astronomer, who was exceedingly earnest to discover it, had a chart of its path furnished him by Delisle, and was consequently constantly on the look out in the path thus laid down, and which proved to be highly erroneous. He therefore lost the honour he sought for, which was gained by a farmer near Dresden, who discovered it on the night of Christmas Day, and the next night he showed it to Hoffman. In the course of the ensuing January, Messier, throwing away the chart of Delisle, swept the heavens with his telescope, and soon had the satisfaction of discovering the comet, being at that time unaware that it had been previously seen. It reached its perihelion on the 13th of

March. In alluding to this circumstance, Clairault observed that we must not rely too strongly on it, when we consider its excursion into space thousands of millions of miles beyond the known limits of the system, where it may encounter other masses to retard or accelerate its progress; it might happen to meet some other planets yet unknown revolving beyond Saturn, which might also exert an influence upon it. Twenty-five years afterwards, Sir William Herschel discovered the planet, which has been called after his name, revolving round the sun one thousand millions of miles beyond the orbit of Saturn. In addition, it may be observed that at the time this calculation was made, the masses of Jupiter and Saturn were not sufficiently known, and Clairault had also neglected to take the influence of the earth into consideration.

Seventy-six, the period of the comet's revolution, being added to 1759, gives the present year, 1835, as the time at which the comet may be expected. In the meanwhile, the progress of physical astronomy had not diminished. The French Institute offered a prize, which drew a memoir from Lagrange, containing a particular method for calculating the return of these bodies, and the disturbances they may undergo by the action of the planets they may pass in their course.

May 1st. As stated in the prefatory remarks made in the commencement of the present notice, Dr. Lardner resumed the subject of his discourse this evening. He commenced with remarks concerning the Edinburgh Review, which it will be needless to reproduce here; after which he proceeded with the real subject of the lecture.

Halley's comet, according to the calculations of modern astronomers, will approach its nearest distance to the sun about the latter end of October or the middle of November; but considerable difficulty was experienced in calculating the period, because the exact mass of the planet Herschel is as yet unknown.

Ponte-coulant, after a long-continued and elaborate investigation, at first fixed the 7th of November as the date of its appearing at its nearest distance from the sun; but on further examination of the question, he corrected his former statement, and gave, instead thereof, the 14th of November at half-past two in the morning. This is not the place, however, where it will be visible, as the comet must cross the orbit of the earth previous to its reaching the sun: it will become visible when nearest the earth, and yet so near the sun as to be illumined by it. This will take place about the latter end of August or early in September. About midnight on the 3rd of October, it will be seen in the east, at an elevation of 30°, and on the 7th it will arrive near the constellation called the Great Bear. It will then be visible from sunset to sunrise; and as this constellation never sets in one latitude, it may be looked for at all hours of the

night. From the seventh to the ninth, it will pass directly across the four great stars of Ursa Major; and between the 9th and the 11th, it will traverse the remaining three stars, at which time it will be best seen.

Another question now arises, whether this comet will be visible, and it is one not easily settled. The astronomer can only say that it will be present in the heavens, and can point out its precise track; but he cannot undertake to say that it will be visible, as that will depend on its apparent magnitude, splendour, &c., and it is highly probable that it will be of a smaller size when it next appears, than at its previous visit. If we look back into history, we shall find that, according to recorded statements, the comet has diminished very much in size and splendour.

Previous to the year 1380, we have only the naked fact stated, that a comet did appear, and as this occurred at the stated time, and in the right track of Halley's comet, there is every reason to believe it to be the same. In this way we can trace it back to 130 years B. C., when its appearance was considered to signalise the birth of Mithridates, and it is recorded to have been of great magnitude and splendour. Calculating the revolutions of the comet as extending to about $75\frac{1}{2}$ years, five visits now passed unnoticed, or at least unrecorded: the next took place in the year 323 A.C.—It again showed itself in the year 399, when it was described as being of prodigious magnitude, and a most fearful appearance. It again missed a period, or rather its visit in 475 remained unnoticed; but its next appearance in 550 was also considered portentous. Four periods again elapsed, without any account of its appearance, the next record noticing its coming in 930, and again afterwards in 1005. We have it again recorded as visiting the sphere in 1230, two visits being again unnoticed. In 1305 it appeared, and was of very great size, extending over a very large portion of the firmament. It was considered the harbinger of the great plague. Its visit in 1380 was recorded, but no further notice taken of it; but in 1456 it re-appeared of such fearful and unheard-of magnitude, as to excite alarm all over Christendom, and was considered by all as the cause, sign, or portent of the invasion of Europe by the Turks. The curving of its tail gave it some resemblance to a Turkish cimeter, the destructive violence of which it was supposed to betoken. This comet was excommunicated by the Pope in the same bull with which he put the Turks out of the pale of the Christian church.

Its appearance in the year 1531 was recorded by Appian, who marked the path it pursued with considerable attention, and noticed also its magnitude: it was then much less brilliant than at its previous visit. In 1607 it was seen by Kepler, who could not distinguish its tail the first time he saw it; but an evening or two afterwards it became visible to him. In 1682 it was carefully noted and watched by

Halley and Flamstead: it was then of less brilliancy and size than in 1607, having the appearance of a star of the first magnitude, surrounded by a nebula. At its last visit, in 1759, it was still smaller, at least it appeared so in our hemisphere: as seen from an island in the South Seas, it had a tail of from 25° to 30° .

If, therefore, we examine carefully the account first given, we shall find that, for the last five visits, it has gradually diminished in size, but, previously, its appearance in a most brilliant and extraordinary manner is recorded, when its visits immediately anterior are not even noticed; consequently, if we are to allow that comets can decrease in size, we must also acknowledge that they have their periods of increase, so that there is a probability that, in sweeping through space, they gather up cometic matter, as well as part with it.

It may be considered necessary that a paragraph, purporting to come from Sir J. Herschel, and now going the round of the newspapers, announcing that Halley's comet had long since changed its course, and now revolved in another orbit, should be noticed. Sir J. Herschel has no means of ascertaining the influence possessed by any disturbing body on the comet, than those at the command of any other astronomer, and the letter is, in all probability, a fiction. There is no question but that such an occurrence might take place, from the operation of one of two causes; the comet may be subject to the attraction of a large mass—a planet beyond Herschel, as yet undiscovered—and be thus turned into another orbit, or it may be crossed by another comet in its path, with which it may coalesce, or they may mutually change each other's orbit. If such an alteration has occurred, Sir J. Herschel has no means of ascertaining it.

Two other comets have been recently discovered, which return regularly at their proper time, namely, those which bear the names of Encke and Biela. Encke's comet has a small elliptic orbit, and completes its revolutions in twelve hundred days; that of Biela has a larger orbit, and requires six years and eight months to traverse its path. The former has always anticipated the proper time for its return by two days, a fact which shows that it is revolving with accelerated speed, and may probably depend on its moving in an atmosphere which offers a slight resistance. The latter has returned only once since its discovery in 1826, and its visit was accelerated by one day, which will assist in confirming the conjecture hazarded concerning Encke's comet, which is further supported by the present theory concerning light, namely that light is not propagated by emanations from a luminous body, but by undulations transmitted from that body through a fluid capable of transmitting it. This atmosphere, should it exist, may be supposed to exert an influence on Halley's comet; but if it does, it will be so slight as to be scarcely perceptible.

We come now to the physical properties of comets, and we shall proceed to examine their mass, weight, &c. A great multitude of comets sweep the solar system from time to time, and yet the planets pursue their course as if no additional body were present, although the theory of gravitation tells us, that if a mass of matter enter the solar system it must have an attractive influence; so that if even one of the smallest masses in the planetary system be not acted upon by the passage of a comet, it must prove that the mass of the latter is very small indeed.

There was a most remarkable instance of this in the June of 1770, when there appeared a splendid comet, which was first observed by Messier, who was called by Louis XV. "the comet ferret." This comet was within the orbit of Jupiter, and visible in an unusually large part of its course, which was very carefully observed: its track was laid down by Lexell, who computed the observations of Messier. He tried three different parts of its course, on the supposition that its orbit was a parabola; the first gave a certain result, from which the second differed, while the third resembled neither. He again commenced his computation, considering the orbit as an ellipse, and he now discovered that he was right, and that the comet would perform its revolutions in five years and a half. Its return was anxiously looked for by astronomers, but it did not again appear, nor, on examination, could any account of a previous visit be discovered. It remained, therefore, a problem which none could solve until Laplace grappled with it. In the second chapter of the ninth book of his *Mechanique Celeste*, he gives a problem:—Take a comet, pursuing a certain course, to determine its path, should it be disturbed by a planet?

He then examined the problem already noticed; he ascertained that the comet which appeared in 1770, had, on the 18th of January, 1767, at noon, passed close to the planet Jupiter, had remained in contact with it until May of the same year, when it was set free, and turned into another orbit. Previous to this, its revolution took place once in fifty years, its nearest distance from the sun being 600 millions of miles, so that it was not visible at any anterior date.

The planet Jupiter performs its revolution round the sun in the course of eleven years; the new orbit of this comet was five years and a half; at the lapse, therefore, of this latter period, Jupiter was at such a distance (having described only one half its course), that it could not exert any attraction on the comet, which had now reached the point where it had been previously disturbed. In such a case, therefore, it should be visible, but the earth was then in such a position with regard to the sun, as to render it impossible. Another five years and a half elapsed, the comet had again made its revolution, and had returned to its starting-place, but Jupiter had

also arrived at the same spot, and again exerting its influence on the comet, changed its orbit to one of twenty years, and in such a position that it will never again be seen. This comet, when it appeared in 1770, came nearer the earth than any other, and now comes the question, what was the mass of that comet, relatively to the earth? Laplace examined this question as follows:—If the mass of the comet had been equal to that of the earth, it would have shortened the year by two hours and a half, whereas it did not lessen it by more than two seconds, so that it is, at least, five thousand times less than the earth. When it passed a second time near Jupiter, it went directly between its satellites, some of which are smaller than our moon, and, consequently, its attraction would be greater, yet their motion was not sensibly disturbed. A comet, therefore, can scarcely be any thing more than an attenuated mass of vapour, and, indeed, the planets have been seen through their head.

The tail of a comet has been supposed to be always turned towards the sun, but this is not invariably the case: it may be sometimes turned towards it, at others from it. Some have two tails, one directed to the sun, the other from it, and it occasionally appears to *wag its tail*. One comet is recorded to have had six tails; and they seldom have the same position for two hours consecutively. The tail of the celebrated comet of 1680 extended one hundred and twenty-three millions of miles.

The light of a comet has been by some considered to be phosphorescent, by others a reflected light from the sun. The question could be more readily determined if these bodies presented phases like the moon, but this they cannot do, as they are not solid, and consequently the sun's light pierces them through and through.

Comets enlarge in size as they recede from the sun, the reverse of which would be expected, as the heat of the sun might be supposed to expand them. Sir J. Herschel has offered two explanations of this curious fact. He considers that the particles of vaporous mass composing a comet have but little attraction for each other, compared with that of the sun, and, consequently, no cohesion; therefore as the comet approaches its perihelion, its particles, attracted by the sun, converge, diverging and enlarging its appearance as it recedes. The other is more ingenious: he observes, that the particles of a comet being vapour, when cooled condense, and form little molecules of solid vapour, which float about, and are partly opaque. These, when highly heated, as they are when near the sun, become invisible, but when a little cooled, become again visible; and illustrates the doctrine by alluding to the steam from a kettle, which, as it issues at a high temperature, is not perceptible, but becomes evident as it cools.

About five or six hundred comets have

already made their appearance, of which one hundred and thirty-seven have been traced. It has been already observed, that planets have a certain plane of preference in which they move, but comets do not appear to affect any such rule; in fact, they move at all angles, without any marked difference in the number passing through any degrees. There is also an equal variety in their perihelion, and points of distribution about the sun. There is rather a greater difference with regard to the time of the year in which they approach their perihelia, more having been seen in the winter than in the summer months, which may be explained by the long nights of winter affording a better time for observation.

With regard to the number of comets, thirty pass within the orbit of Mercury; and as the orbit of the planet Herschel is forty-nine times the diameter of that of Mercury, it includes one hundred and seventeen thousand, six hundred and forty-nine times more space than does the orbit of the latter planet; consequently, for every comet contained in Mercury, there are one hundred and seventeen thousand, six hundred and forty-nine in Herschel, which will make somewhere about three millions and a half; but as it is likely that there are at least double that number of comets in the orbit of Mercury, the probability is, that there are in all seven millions of comets.

British Hospital Report.

NORTH LONDON HOSPITAL.

Lithotomy.

HENRY SHORE, 27 years of age, admitted the 30th of April, 1835, with stone in the bladder, was brought into the operating theatre on the 2nd of May, to undergo, in the presence of a large assembly of pupils and practitioners, the operation of lithotomy, which was performed by Mr. Liston in a most clever and masterly style, and within the short space of forty-five seconds, reckoning from the commencement of the first incision to the removal of the calculus.

Mr. Liston, previous to operating, said that the patient had been attempted to be relieved by lithotripsy, without avail; but his modesty probably prevented him from informing us why; as we have since learnt that he has been the inmate of more than one of our public hospitals of this metropolis within the last few months. When the operator sounded the patient the preceding day he was prevented from judging of the probable size of the stone, from the great irritability of the bladder, which was very manifest when the poor fellow was sounded on the table. After the staff was introduced, and the usual method of securing the subject adopted, Mr. Liston commenced

his first incision, with the common scalpel, on the left side of the raphe of the perinæum, and about an inch above the anus, carrying the knife downwards to the extent of nearly three inches; the second stroke of the knife reached the groove of the staff; and a free incision was made into the bladder. With the index finger he ascertained the size and position of the stone, turned it in the axis of the wound, introduced the straight forceps, seized the stone, and withdrew it in a most deliberate manner, and without the least force. It measured about two inches in length, one in breadth, and weighed about fourteen drachms, and was principally composed of lithic acid.

The great fame that Mr. Liston had deservedly acquired in the Scottish metropolis, as a bold and skilful operator, has naturally created not a small hue and cry among our dexterous operators as to how far he will maintain this renown here. We should say, from the facility and adroitness of manner in which he achieved this operation, that he will not only maintain it, but greatly increase it, as it must be borne in mind that Mr. Liston has not directed his attention more exclusively to lithotomy than any other capital operation.

INDIAN SURGERY.

“THE faculty will be surprised at the Seik mode of curing a wound received from a tiger, at variance as it is with European practices. They entertain an opinion that if a person who has been so wounded be allowed to sleep, he will see the tiger in his dreams, and thus lose his heart and inevitably die. They, therefore, furnish the patients with the strongest stimulants, and set people to prevent his falling asleep for five or six days. By that time the wounds assume a certain appearance, and they then permit the man to rest. In the instance which I have mentioned, I can answer for the copious use of stimulants, as we supplied the brandy.”—*Burnes's Travels into Bokhara.*

CURE FOR THE TASTE OF QUININE.

“It is said that the natives of Mazanderan are the most simple of all the Persians, and we had some amusement at the expense of one of our fellow-travellers, who applied for medicine to arrest an intermitting fever. I gave him quinine, and afterwards took occasion to ask him how he liked its bitter taste. “It has no taste,” replied he; for he had swallowed it along with the paper in which it was packed up!—*Burnes's Travels into Bokhara.*

APPOINTMENTS.

Naval.—Mr. D. Knight, surgeon, and Mr. P. Brennan, assistant-surgeon to the *Clio*. Mr. J. S. Hampton, assistant-surgeon to the *Champion*. Mr. Alexander Anderson, assistant surgeon to the *Basilisk*. Mr. A. Kidd, surgeon, and Mr. J. Mitchell (*b*), assistant-surgeon to the *Magicienne*.

Military.—Mr. George Northen Foaker has been appointed assistant-surgeon to the Forces, vice Dawson promoted to the 5th Foot. The appointment of Staff Assistant-Surgeon Wm. H. Fryer, from the half-pay, to be assistant-surgeon to the Forces, vice Dyce, who exchanges, dated April 17, has not taken place.

General.—Mr. Walter Golland, house-surgeon to the Manchester Loyal Infirmary, Dispensary, Lunatic Hospital, and Asylum. Mr. J. C. Brickwell, medical attendant for the Banbury district; Mr. Wise, ditto for the Mellington district; Mr. Martin, for the Bloxham district; and Mr. J. P. Conway, ditto for the — district, all four being in the Banbury union. Dr. Johnson, physician, and Mr. Wales, surgeon, to the Belfast Fever Hospital. Dr. Henry Holland, physician-extraordinary to the King.

Resignations.—Mr. Chas. Hurleton, house-surgeon to the West Sussex, East Hampshire, and Chichester Infirmary. Surgeon Henry Franklin, of the recruiting staff on the Cork establishment, has retired from the army.

MISCELLANEOUS.

On Saturday, the 2nd inst., the distribution of prizes took place at the Westminster School of Medicine. A number of visitors as well as students were present. Dr. Burne in the Chair. Each of the Lecturers gave two prizes for the two best essays written on the respective subjects.

Criminal Information.—*Dublin Court of King's Bench, Saturday, April 25, 1835.*—*Shee v. Barry.*—Mr. Jackson, K.C., appeared on behalf of the defendant, to show cause why the conditional order for a criminal information obtained last term in this case should not be made absolute. The prosecutor, Dr. Shee, stated that he went down to reside and practice in the village of Cappoquin, in the County of Waterford, where the defendant kept an apothecary's shop. They had been on habits of intimacy for some time, until some one told Mr. Barry that Dr. Shee had been directing those patients for whom he prescribed not to send his prescriptions to Mr. Barry to make up. They happened to meet in the street, when Mr. Barry taxed the Doctor with having thus attempted to injure him. The latter denied the fact as stated to him. Mr. Barry told the Doctor that he did not believe him. The conversation ended, as Dr. Shee alleged, by Mr. Barry's telling the Doctor that "he was a ruffian, that he was not done with him yet, and that he would whale him." The Doctor, my lord, said Mr. Jackson, immediately walked away, not liking the operation. The Solicitor-General—Such has been the practice of medical gentlemen from time immemorial, *by prescription*—laughter. Mr. Jackson continued—Dr. Shee shortly after met a Mr. Thomas Healy, a friend of Barry, who told him that the latter had commissioned him to tell him again that "he was a scoundrel." Mr. Barry had put in an affidavit denying some of these allegations. He stated that the Dispensary attendant, had been the cause of quarrel between them,—Dr. Shee endeavouring to get appointed to it; that he never, in any manner, had spoken disparagingly of Dr. Shee's talents as a medical man, but that the Doctor had prevented persons who had been customers of his from sending prescriptions to his shop. Irritated by his conduct, he certainly had spoken rather warmly to him, and had made use of some of the expressions im-

puted to him, but which, he submitted, were extenuated by the attempt of the prosecutor to injure a man having a large family depending upon him. He denied, however, that he had the slightest intention of provoking him to commit a breach of the peace. The Court suggested that there should be a settlement of the dispute between the parties, without calling on the Court to proceed further. The Solicitor-General acceded to the propriety of their lordships' suggestion; and the matter was accommodated on an apology being made by the defendant, who was ordered to pay the costs.

Dr. Robert Hooper.—The celebrated author of the Medical Dictionary and of the Physicians', Surgeons', and Anatomists' Vade Mecums, expired at his residence at Stanmore Priory, Great Stanmore, on the 6th inst. For several years past he had retired from active practice, visiting only a few patients in his immediate neighbourhood. He was attached to the Marylebone Dispensary during a large portion of his life, at first as resident apothecary, afterwards as physician. On his resigning the latter office, Dr. Hooper and Dr. Sims were elected. Dr. Hooper held a diploma from the University of Cambridge as Bachelor of Medicine, and likewise the license of the College of Physicians in London.

WEEKLY BILL OF MORTALITY.

London, Tuesday, May 5, 1835.

Abscess	3	Heart, Diseased	1
Age and Debility	21	Hooping-Cough	12
Apoplexy	1	Inflammation	14
Asthma	12	Inflammation of the	
Cancer	3	Brain	2
Childbirth	3	Inflammation of the	
Consumption	49	Lungs and Pleura	1
Constipation of the		Insanity	2
Bowels	1	Liver, Diseased	1
Convulsions	32	Measles	5
Croup	3	Mortification	4
Denitition, or Teeth-		Paralysis	3
ing	5	Scrofula	2
Dropsy	8	Small Pox	15
Dropsy on the Brain	5	Sore Throat & Quinsey	3
Dropsy on the Chest	1	Thrush	1
Fever	1	Tumour	1
Fever, Scarlet	7		
Fever, Typhus	1		
Gout	1	Stillborn	6

Buried, Males 114 Females 120 Total 234
Decrease in Burials reported this week, 417.

DEATHS.

At Beltrubet, Co. Cavan, Alexander Charlton Bell, Esq., assistant-surgeon R.N. (1829). Mr. William Burge, of Old Market-street, Bristol, surgeon. Dr. Charles Warburton Riggs, of Rosstrevor, Co. Down. Dr. John Warrock Pursell, of George-street, Edinburgh. Mr. Egerton Jennings, of Leamington, surgeon. Mr. Henry Paget, of Wallsall, surgeon. Mr. Joseph Crane, of Kidderminster, surgeon. Mr. Wm. Newborough Sandford, of China-terrace, Lambeth, surgeon.

LITERARY INTELLIGENCE.

In the press and will be speedily published, a Treatise on the Uses of the Stethoscope, together with a Description of one upon a New Construction. By H. W. RUSH, M.R.C.S., and Lecturer on Comparative Anatomy at the Westminster School of Medicine. H. Renshaw, London.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE XI.

General Account of the Spotted Fever Epidemic in Dublin, in 1834-5 — Its most remarkable Features—Insidious Character—Further explanation of the reasoning which led Dr. Graves to the Discovery of the Utility of Tartar Emetic in its latter Stages—Dr. Nolan's remarkable Case of Enteritis, with Collapse, cured by enormous Doses of Opium — Cases of singular Proportions between the frequency of the Pulse and of Respiration—Case of Acute Esophagitis.

GENTLEMEN,—When I last addressed you, I spoke of a very important topic—the administration of tartar emetic in the advanced stages of petechial or maculated fever. A few observations descriptive of the present epidemic fever appear necessary. The commencement is frequently by no means violent in proportion to the subsequent danger, and the patient often appears merely to labour under the symptoms of a common feverish cold, seldom preceded by violent rigors, but attended by a frequently recurring sense of horripilation. The pulse in the very beginning seldom exceeds 90, and in nearly half the cases it falls after a few days to 80, 70, or even lower. This slow pulse I observed in many of the pupils, and in all it was found to accompany a very tedious and dangerous form of fever. Mr. Sangster, Mr. Graves, Mr. Harris, and Mr. O'Flaherty, were all so affected, for none of these gentlemen had a pulse exceeding 70 in a minute for many days before the period of the greatest danger. In other epidemics similar cases have occasionally occurred, but in none near so frequently as in the present. When the pulse was thus tranquil the skin was not perceptibly hotter than natural, although occasionally a slight degree of the *calor mordax*

could be detected. Patients with a slow pulse not unfrequently had little to complain of at first, for the headach, general pains, thirst, and restlessness generally underwent a notable diminution, in consequence of sweating, which came on in the commencement, the appearance and the good effects of which were well calculated to deceive the practitioner into a belief that the fever had terminated. A more accurate examination, however, showed that this was not the case, for the tongue still continued much loaded, white in the centre and red at the tip, and the apparent subsidence of the fever was found to be accompanied by a remarkable increase of debility. As the disorder proceeded, a slight rash, like ill-defined or suppressed measles, became observable in some before the fourth day, but much oftener about the seventh. This maculated appearance of the skin increased rapidly, spreading over all parts of the trunk and extremities, and in many amounted to a well-marked efflorescence of a dusky red colour: in others it was as it were suppressed, and was less obvious, but was still discernible by an experienced eye, appearing beneath as if veiled by the skin. It was not totally absent in one case out of twenty, which occasioned me to name the disease *maculated fever*. So the patient continued, in general, until the ninth, tenth, or eleventh day, resting sufficiently at night, with a moderate or even a slow pulse, some thirst, foul tongue, little or no nausea, epigastric pain, or abdominal tenderness of any sort, and, in fact, without a single symptom calculated to excite alarm. About this period of the complaint matters began to assume a more threatening aspect; debility manifestly increased; the mind at times was evidently incoherent, particularly after awaking from sleep: and then raving during the night; restlessness; frequent attempts to get out of bed, not unfrequently supervened in the course of a few days. The pulse meantime rose very suddenly in many, and continued to be frequent during the period of danger. Thus, on the tenth day, Mr. Synn's pulse rose from 85 to 120, and so continued until about the twentieth day, when improvement commenced. The same sudden rising of the pulse took place on the ninth day

in Mr. M'Namara, and he died on the 14th day. In others, as I have already remarked, the pulse continued tranquil throughout. Thus it was very curious to see a patient with a skin of a natural temperature, a perfectly natural pulse, tranquil respiration, clear eye, no headach, a soft and fallen abdomen, without the slightest tendency to epigastric tenderness; it was very curious, I say, to see such a patient in a state, nevertheless, of extreme danger, passing both fæces and urine under him, raving, incoherent, or with a low muttering delirium, subsultus daily increasing until it became excessive, the greatest possible degree of debility, a dark macular efflorescencè, and at length total sleeplessness. How many theories of fever were refuted by such a case! Usually as the disease continued, and when the patient was in a very dangerous state, but seldom or never before that, the intestines began to be inflated, and the belly gradually became tympanitic, a circumstance of bad omen, and which was often the precursor of hiccup. When the symptoms did not yield to the efforts of nature or of art, the congestion of the intestinal mucous membrane, indicated by these symptoms, was soon followed by indubitable evidence of cerebral congestion, such as reslessness, suffusion of the adnata, and contraction of the pupils; this last was the most fatal of all symptoms. In two or three cases, as for instance, that of Mr. Cookson, the cerebral congestion produced repeated fits of convulsions on the 13th day, and yet he recovered. The same happened in a young woman in Sir P. Dun's hospital, in whom the convulsions occurred on the 15th day, and were more violent on the right side than on the left, producing strabismus, and insensibility of the pupil of the affected eye. This girl lost the use of her left side on that day, but recovered it on the following, and eventually, though with difficulty, was completely cured. Frequent fits of convulsions, affecting the right side more than the left, took place on the seventh day in the daughter of a clergyman residing in the Liberty, and were followed by a stupor bordering on coma, which lasted for many hours. All these patients were covered with maculæ.

I am thus particular in dwelling on the symptoms manifestly denoting a combination of primary general nervous excitement with a secondary cerebral congestion, for on the successive development of these states the treatment during the latter stages hinged. I wish you clearly to understand, that after the headach and cerebral excitement which accompanied the very commencement of the fever had been subdued, or had ceased, after sleep and calm had returned, and had continued for many days, then a new order of things commenced—subsultus, watchfulness, muttering raving, involuntary discharges, &c., all denoted great derangement of the nervous system; but still there was no proof that this derangement depended on cerebral congestion.

After a few, or after many days, however, unequivocal symptoms of the latter set in; the face and eyes became suffused and flushed; the pupils manifested a tendency to become contracted, and occasionally convulsions took place; the patient became totally sleepless. When the latter and dangerous period of the fever was accompanied by the former nervous group of symptoms alone, they yielded to wine, musk, porter, and opiates; but when the symptoms indicating cerebral congestion were superadded, then it was that the case assumed so great and striking a similarity, so far as the functions of the nervous system were concerned, to the well-known variety of delirium tremens accompanied by cerebral congestion,—to that variety of delirium tremens, in fact, which can only be successfully treated by the judicious but bold exhibition of tartar emetic combined with laudanum. *It is the discovery of the utility of this practice in the advanced stages of spotted fevers that I claim peculiarly as my own*, for there is not in the writing of any author on the subject the slightest trace of such a method of treatment to be found. As this method has manifestly saved many, many lives, under a combination of circumstances apparently hopeless, I cannot avoid congratulating myself upon being the first to propose a practice which has not only diminished the rate of our hospital mortality* in a remarkable manner, but has been the means of saving many of my friends and pupils; for without its adoption our class at the Meath Hospital would have been more than decimated, whereas, at present, we have to regret the loss of but one pupil.

One word more, gentlemen, as to the circumstances under which this plan was applicable. They were exactly the circumstances which formerly would have been believed to demand the fresh application of leeches to the head, of cold lotions, and of blisters, for it was formerly argued, and justly, we have in this advanced stage of fever not merely debility to combat, not merely general nervous excitement to overcome, but we have also to contend with cerebral congestion. The latter is the most formidable of the whole; let us meet it boldly; let us leech, let us purge, &c., &c. I need not repeat to you, gentlemen, the details of cases illustrating the ill effects of this practice. Suffice it to remark, that you might as well attempt to cure *delirium tremens* with mere leeching, purging, and blistering. Observe, I am now speaking of the advanced stages

* Seventy-three fever patients, namely 41 males and 32 females, were treated in the clinical wards at Sir P. Dun's Hospital during the months of February, March, and April. Of these more than fifty were cases of maculated or spotted fever, and yet we lost but two females and one male. The latter was in a hopeless condition when brought in, and one of the former was attacked by varioloid just after the crisis of long-continued spotted fever,

of fever, for where cerebral congestion takes place in the beginning or the middle of fever, then is there no room for opium, then will the practitioner have recourse to the well-known remedies for active cerebral congestion, viz. purging, leeches, cold lotions, ice to the head, &c., &c. In the preceding sketch of the present epidemic, many important features have been omitted. The outline is only complete in such parts as were required to be filled up for the purpose of illustrating the principles which directed me in devising and employing this new plan of treatment. I shall conclude these observations with a few details of Mr. Thomas O'Flaherty's case.

This young gentleman was seized with the usual symptoms of maculated fever, of an insidious character, and not attended with any appearance of danger during the commencement of the disease. His pulse never rose above 100, and before the seventeenth day of the fever it had fallen to 70, *at which it remained during the period of greatest danger.* The only circumstance which excited alarm in my mind at an early period of his illness, was a great degree of mental apprehension manifested in his anticipating an unfavourable result, together with a tendency to sleeplessness from the beginning. On the tenth, abdominal tympanitis was observed, but this was removed in two days by appropriate remedies. On the twelfth day, he was very restless, and although he was perfectly rational in his answers to questions, and did not complain of headach, nor had flushing of face, or heat of the integuments of the head, yet he frequently talked incoherently when left alone, and towards the latter part of the day began to make repeated attempts to get out of bed. On one occasion he succeeded, and walked down stairs from the garret to the parlour. His tongue was brown and dry. Under these circumstances I ordered him the mixture containing four grains of tartar emetic and one drachm of laudanum, in eight ounces of camphor mixture; of this he took ℥ij. every second hour. The effects produced by this medicine were not very rapid, but still they were decidedly beneficial, for he gradually became calmer, wandered less, did not attempt to get out of bed, and during the night got some sleep. His bowels being confined, the mixture was now laid aside and purgatives exhibited; I should have remarked that the tartar emetic mixture caused profuse sweating. On the fifteenth day of the fever, his bowels having been acted on, he was ordered twenty drops of Battley's solution of opium at night, which produced a comfortable night's rest, the first he had enjoyed since his illness. On the 16th the sweating continued, belly was fallen, and he was quite rational, but had marked subsultus; he got another dose of Battley, but it produced no sleep; he had been allowed chicken-broth, beer, &c., for some days. On the seventeenth day the sweating had ceased,

and his skin had become hot and dry; great restlessness, constant muttering delirium, subsultus, tremors, picking the bed-clothes, involuntary discharges. Porter in small quantities, chicken-broth, scætid injection, and twenty drops of Battley at night. On the eighteenth, he was reported to have had no stool from the injection, and no sleep whatsoever. He answered incoherently, thought his bed was covered with lancets, some of which he collected carefully, and reserved for me; belly not tumid, but obstinately confined; pulse 100. The whole of that day and the following were employed in procuring alvine evacuations preparatory to again giving opium; in the meantime all his symptoms were aggravated, and when I visited him on the evening of the nineteenth day, his state was anxious in the extreme, as he had enjoyed no sleep for many days and nights, and was in a melancholy state of mental incoherence, raving, tremor, and subsultus. Here came the crisis as to treatment. I remember well the time when a patient so situated would have been again purged, his head would have been shaved, a few leeches applied to the temples, and a blister to the nape of the neck, while perhaps wine and musk would have been exhibited internally. How many persons have I seen so treated by the most eminent physicians, and how unsuccessful was the practice. To have talked of giving opium under such circumstances, and when the marks of cerebral congestion were so evident, would have been regarded absurd; my experience on former occasions, however, determined me to give opium, and, as the danger was imminent, I gave it boldly. To the eight ounce mixture with four grains of tartar emetic we added one drachm and a half of laudanum: of this he took one ounce every second hour from eight in the evening until he had taken five doses. This produced copious sweating; the skin became cooler, he raved less, but still no sleep; at four on the following morning, his pulse being 70 and respirations tranquil, he got twenty drops of Battley, and at half-past five in the morning, twenty-five drops more. He had now taken within a short time about one drachm of laudanum and forty-five drops of Battley, combined with nearly three grains of tartar emetic. He was tranquil, but did not close his eyes, and muttered occasionally; subsultus less. His pupils now became more and more contracted, his eyes less expressive and duller, and when I came at eight in the morning, he was evidently deeply narcotised, although not yet asleep. I thought that all was lost, but still, observing the respiration to be tranquil, and the pulse regular, I indulged a faint hope that sleep might still supervene. His eyes now became still more inexpressive, the lids gradually closed, his breathing became prolonged and deep, and at half-past eight he was buried in a profound and tranquil sleep, which continued for nine

hours, when he awoke, spoke rationally, said he had no pain in the head, took some drink, and fell asleep again. Next morning not a single symptom of fever remained.

I need scarcely observe, gentlemen, that the proportions of the two powerful medicines which compose this mixture must vary according to the circumstances of the disease and the age of the patient. In young persons of tender age the opium must be given in smaller quantities.

There is one circumstance connected with this epidemic, but which I have also frequently witnessed in other sporadic and epidemic fevers, to which I wish forcibly to draw your attention, it is the existence of tenderness generally over the body, and which causes the patient to shrink from the pressure of the finger applied to any part of the integuments. This tenderness arises from an irritated state of the nervous system generally, and is usually accompanied by severe dorsal or lumbar pain indicating spinal congestion. Now in a practical point of view this tenderness requires attention, for if it be overlooked, and if the physician applies pressure in such cases only to the epigastrium, he will be deceived into the belief that the tenderness he there discovers is confined to that part, and indicates the application of leeches to the pit of the stomach.

You may observe, gentlemen, that I have not yet spoken of the liquor of the chloride of soda, a remedy you have seen me order with such remarkable advantage in almost all the cases of spotted fever. It is my intention to devote an entire lecture to a consideration of the nature and properties of this medicine, so successful in the hands of myself and my colleague Dr. Stokes.

Having spoken so much of the salutary effects of opium in certain stages of fever, it may not be irrelevant to our subject to introduce to your notice, gentlemen, a remarkable case of violent enteric inflammation, attended, as such cases always are when exceedingly intense, with cholera-like collapse in the very onset of the disease. This case was saved by means of thirteen or fourteen grains of opium given in the course of 24 hours, a plan of treatment which I first proposed, and which has since been very generally adopted.

I shall take the liberty of reading to you the following letter from my friend Dr. Nolan.

My dear Doctor,

The following is an abstract of my notes upon the case of my servant Horan.

On Monday evening, 27th February last, he casually complained of pains in his bowels; they had not been freed on that day, and supposing it an instance of mere indigestion, I ordered him five grains of calomel, and a draught of castor oil. For that night I heard no more of him, but, early on the following morning, I was hastily summoned by one of his fellow-servants, who reported that he was

dying. I found him labouring under severe but intermitting pain of the belly, particularly about the umbilicus, *violent and frequent cramps*, especially of the lower extremities, and occasional vomiting. The surface was perfectly cold; features sunken; eyes surrounded by a dark areola; voice subdued to a whisper; pulse 140, small and feeble; abdomen tender though not at all tumid. He told me he passed the night in great torture, and that the bowels were still unmoved. I immediately ordered ten grains of calomel, to be followed in two hours by an oil and turpentine draught, a turpentine enema, bathing, &c.

Three hours subsequently—temperature restored; cramps less violent; vomiting less frequent, but bowels obstinate; face and pulse equally unpromising as before; abdominal pain increased. Was this incipient inflammation? and what is the cure for inflammation? Bleeding? Well, I did bleed; but scarcely had four ounces been taken when I was very glad to tie up the arm; the prostration alarmed me. Something at all events ought to be done, and I ordered a sinapism to the abdomen, a repetition of the enema (for I confess I have not much confidence in frequent or powerful purgatives), a powder composed of calomel two grains, opium quarter of a grain, to be taken every fifteen minutes. Towards evening I thought my patient rallied a little; his countenance was better; pulse firmer; his abdominal pain not increased, and he vomited but once; the injection brought away with it a little mucus, but no more. Repetat haustus terebinth. Repetat quoque enema. During the night there was just a trace of feculent matter, but vomiting returned, and I found him in the morning (the second of his illness) suffering an increase of pain; the abdomen, too, was now not only extremely tender, but *decidedly swollen*; the pulse remained quick and weak as ever. I could not discover that he passed water. Would you not call this inflammation? But would you bleed for it? I did unfortunately to as great an extent as I could, which was about eight ounces, and the cadaverous look, the cold-clammy surface, in short, the absolute collapse which succeeded and *continued for hours*, gave me strong reason to regret it. *It produced no impression* upon the pain. I had read with great interest the invaluable observations of yourself and Dr. Stokes, as well as the publications of Armstrong, Griffin, Gooch, &c., wherein the applicability of opium to certain modifications of abdominal inflammation is forcibly demonstrated, and I thought my patient precisely in the condition in which you would probably have recourse to that powerful agent. I therefore commenced exhibiting half a grain of opium and two of calomel every half-hour. After the second hour I substituted for the calomel three grains of carbonate of ammonia, which, with the opium as before, I continued during the day and the whole night. In the morning (the third) I had the satisfaction of

ascertaining that the pain and swelling had considerably subsided, and that the bowels had been twice opened; the countenance now spoke promisingly, and pulse began to fall. I however persevered in my plan of treatment for the day, and, indeed, for the two following nights and days (gradually increasing the interval between each dose however) until all trace of pain and obstruction had disappeared. The bowels continued to act from time to time, although I never ventured upon another purgative; the dejections were at first largely mixed with blood and mucus, but soon assumed every character of health. Of the sequel (may be the consequence) of this interesting case, you most kindly undertook the management, and I shall add nothing to this meagre statement of facts, which Mr. O'Donnell (of Keane's, in Suffolk-street), to whose humanity and care I am deeply indebted, witnessed as well as myself. I shall leave you to speculate upon the propriety of bleeding at all under such circumstances. I shall also leave you to decide whether the increase of inflammation, which certainly occurred when I first gave up the opium plan (on the first night) for the sake of interposing a purgative, was to be attributed to the change or not. May not the case throw some light upon the use or abuse of purgatives? But I am doing more than I intended, and more than is useful.

I remain, my dear Doctor,

Yours most truly,

J. NOLAN.

April 19, 1835.

10, College Green.

Let me now return to a subject concerning which I spoke lately, viz. the pulse. In the case of a young man named St. Leger, who was lately a patient at Sir P. Dun's Hospital, the variation of the pulse in different positions of the body was very remarkable. He was just recovering from fever, and exhibited a state of the pulse which is not unfrequently observed under similar circumstances. During his convalescence the pulse went on declining in frequency, until it sank to thirty-six in the minute. When I made him sit up in bed, his pulse began to rise rapidly, and, in the space of a minute, was at sixty-four. When he stood up it became much quicker, but grew so weak and indistinct, that it could not be felt at the wrist. On applying a stethoscope over the region of the heart, I found that its pulsations amount to 112 in the minute. Here is a very remarkable difference of pulse depending entirely on change of position. With respect to the number of respirations in this young man, I found that when lying down they were only fourteen, but when he stood up they were thirty. This is a very curious fact, and one which I have not before observed.

In this case, the pulse was very little more than in the proportion of two and a half to one, as compared with respiration, whereas it ought to be as four to one. We had another case at the same time in the Hospital, in which

the pulse was 84, and the respiration 42 in a minute; and a third case, in which the pulse was 120, while the respiration was only twelve. I have myself seen one case in which the pulse was 60, and the respiration 50.

This variation in the relations which the pulse and respiration bear to each other, is principally observed in fever and pulmonary disease. I am at present attending a lady in fever, whose pulse was 120, and respiration 26, until within the last twenty-four hours, since which respiration has increased to 40, but the pulse has sunk to 86. Now, is this lady's state improved? Would you prefer having her in her present or past condition? For my part, I will say that in such a case I would rather have the pulse than the respiration accelerated. A quickening of the breathing in fever, without any particular lesion of the thoracic viscera, is always a proof that the muscular powers of organic life have been injured; that the diaphragm and respiratory muscles are impeded in their functions; and that the case is of a dangerous character*.

I do not know, gentlemen, any point on which accurate observations are more wanting than on the proportion between the pulse and respiration in various states of the system, and in various diseases. Facts upon this subject might be easily collected, and would probably lead to curious and instructive results. This would form an excellent subject for a monograph, and might be investigated by any student who possesses attention and perseverance, and has extensive opportunities for observation. Having touched upon the change in the frequency of the pulse produced by alteration of position, I may here remark that subsequent observations have confirmed the validity of the diagnostic mark which I was the first to draw from this circumstance in distinguishing functional from organic disease of the heart. The general proposition may be now considered as established, that in a debilitated person, when a sudden change of position makes little or no difference in the frequency of the pulse, we may conclude that the heart, or at least its left ventricle, is increased in size and strength.

The following case of acute inflammation of the œsophagus is particularly worthy of your attention, on account of the extreme rarity of the disease, and because its symptoms have, for that reason, been either erroneously or imperfectly described by authors.

My friend Dr. Mackintosh, in his Elements of Pathology (vol. i. p. 228), observes, "That of all the structures in the human body, the œsophagus is perhaps the least liable to disease. In general it is difficult to detect inflammation of the œsophagus till ulceration and constriction take place. I have seen only one case of universal inflammation of this tube not caused by poison," &c.

It is no wonder, therefore, that the descrip-

* The lady referred to died.

tion Dr. Mackintosh gives of the œsophagitis is very imperfect. The same may be said of that given by others. The best description of the disease is that given by J. P. Frank in his Epitome. If I recollect right, Abercrombie has recorded one well-marked case of œsophagitis. Strange enough, this disease is not spoken of at all in that excellent work, the Cyclopædia of Practical Medicine.

The inflammation in the following instance was evidently the result of cold, and occurring in a healthy habit, it ran through its course in a few days. The case is in the gentleman's own words, for when the disease was cured I requested him to give me a short account of it in writing.

"February 24th, 1835.—For some days I felt as if I had caught cold, with something like sore throat. I felt as if the root of the tongue at the left side was sore. By degrees this extended downwards; a ring about the lowest part of the throat became painful on swallowing. The pain was most sensible at the left side.

"26th.—I took a bit of bread before dinner, and, on attempting to swallow it, perceived great pain from the commencement of the throat, proceeding downwards towards the chest, as if the bread was then impeded by something, and from thence it seemed to proceed with increased pain to the back between the shoulders. I felt no want of appetite at dinner, but the attempt to swallow caused considerable pain. The night was passed in a state of great restlessness and with headach, violent pain sometimes seizing me on some little change of position, as it does in lumbago. The pain then seemed to affect the whole chest, and, extending to the back, caused a hot, burning sensation directly between the shoulders.

"27th.—On attempting to swallow, I felt such pain as to force me to cry out as if the entire passage from the throat to the stomach was inflamed, and that every thing, whether fluid or liquid, had to force its way painfully through the passage. In swallowing it seemed doubtful whether the food could proceed."

So far the details were furnished by the patient himself. In addition I may remark that, on the 28th, the inflammation had evidently begun to diminish, and that in the course of a few days more it had entirely disappeared. The treatment was restricted to abstinence and antimonial diaphoretics. There was no redness to be seen in that part of the throat which is visible when the mouth is opened.

LECTURES
ON
MIDWIFERY & THE DISEASES
OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,
ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXI.

Dystocia from a Faulty State of the Expelling Powers.

GENTLEMEN,—I now come to that species of dystocia where the labour is protracted or rendered incomplete from a disproportionate condition of the means which are destined for its completion; or, in other words, it is the *dystocia ex defectu virium expellentium*. In this case the cause of faulty condition of the labour lies in the following circumstance: viz. —that the activity of Nature does not attain that degree which is adapted to the constitution of the individual, under otherwise perfectly regular condition of the parts, which produce the resistance during labour; or, in other words, there is *that* degree of resistance which corresponds to a healthy state of the expelling powers of the individual, and if, after a careful examination, we find no misproportion in the natural causes of resistance, we are of course led to suppose that the expulsive powers are at fault.

Dystocia from a faulty state of the expelling powers consists either in, first, an irregular or faulty state of the contractile powers of the uterus; or, secondly, in a similar condition of the partly voluntary, partly involuntary, activity which is destined to assist the uterine contractions.

The uterus is well known to play the chief part during parturition; by means of its power most of the natural impediments to the passage of the child are overcome; by an increase of resistance its activity frequently becomes increased to a wonderful degree, and under such circumstances it will display a perseverance which is almost inexhaustible. Hence we observe a remarkable peculiarity in this organ, viz.—that in great and universal suffering and weakness of the whole system, in general convulsions, asphyxia, &c., the display of its power seems to be but little impaired; even after death for a time it still continues to act. In paralysis, ascites, and extensive disease of other organs, we see its contents rapidly expelled, nor is there any organ which shows itself so independent of the rest of the system, or which possesses such a degree of automatic life, if I may use the term, as the uterus.

Under the first head, therefore, of this subject we must consider those labours which are rendered difficult or dangerous from a faulty contractile power of the uterus itself. The

cause here depends upon a defect which is either functional or mechanical, or on a complication of both, as, for instance, in injuries of the uterus from rupture, cicatrices, scirrhus carcinoma, &c. The deviations in the vital tone of the uterus, by which the display of its power (the pains) is impeded, are various, and result from various causes. The pains are insufficient either as to the degree of their power or as to their direction, or are insufficient in proportion to the sensation of pain which accompanies them. In the first case, the pains are of themselves too weak, or last too short a time; they break off too soon, or follow each other at intervals of too great duration, or cease entirely. These irregularities in a less degree occur very frequently, especially in a woman for the first time pregnant, in weak, nervous subjects, or where the patient is either very young or very old. The causes of these deviations may arise, first, from weakness of the uterus, depending on general weakness, previous disease, debilitating evacuations, or from debilitating causes acting generally, as bad nourishment, foul air, depressing passions on the mind, misuse of medicine, &c. Emotions of the mind affect the uterine action, not only indirectly by producing debility, but in a more direct manner; thus we frequently find that an imprudent remark, hint, or even look upon the part of the attendants, or the sudden and unexpected entrance of the medical man into the room, is sometimes sufficient to make the pains disappear for some time: the dread of a vaginal examination is frequently known to produce this effect.

2ndly. The strength of the uterus may be weakened by excessive distension of its parietes from twins, triplets, too much liquor amnii, &c.; labours following each other too rapidly, previous abortions or hæmorrhages, violent exertions at the beginning of labour, fluor albus, excessive menstruation, and the misuse of forcing medicines, as they are called; and yet, with all this, in highly syphilitic patients, I have seen powerful and severe pains.

3rdly. Defective contractile power of the uterus may be also hereditary.

4thly. It may arise from plethora uteri. Its symptoms are those of general plethora. The abdomen is larger than usual, there is an unusual sensation of weight and warmth in the abdomen and about the pelvis, the external parts of generation are swelled, before the commencement of labour, or in the interval between the pains, the parts of the child and its motion are more difficult to feel externally, on account of the greater thickness of the uterine parietes.

5thly. Defective contractile power of the uterus may arise from rheumatic inflammation. This state frequently exists before the commencement of labour, and acts in the same manner as rheumatism does in other parts: its causes are also the same, viz.—rheumatic diathesis, catching cold, exposure to sudden

alternations of temperature, light clothing, especially in summer-time, returning heated from balls, &c., not sufficiently wrapped up.

The symptoms of this affection are a sense of drawing pain in the loins, the vicinity of the pelvis, and the thighs, sometimes coming on for many weeks before labour, so as frequently to assume the appearance of real pains; during labour the uterine contractions are unusually painful, they are of short continuance, not sufficiently active, and return too seldom; they come on irregularly, and their painfulness increases with the progress of labour, and with the degree of their efficacy. Regular contractions of the uterus are only painful when they reach their height, whereas these are painful when they begin, and the slightest excitement of the uterus produces a sensation of pain. The dolores præsentantes, which in a state of health scarcely deserve the name of pains, now produce much suffering, and the uterus, especially at its mouth, becomes very tender upon pressure. In these cases the pains frequently disappear entirely for several hours and then return after a sleep, from which the patient wakes in a gentle, equable perspiration, with a remarkable feel of comfort and refreshment; the contractions now become regular, and the labour ends well. Sometimes, however, this state increases, especially if left to itself or badly treated, and often arises to an extremely intolerable degree. From this reason, as well as from its long continuance, an injurious protraction of labour may result, producing much weakness, and, in irritable nervous habits, spasms and convulsions. It may even pass into actual inflammation of the uterus.

6thly. It may arise from colic pains. Experience teaches us that during these false pains, as they have been termed, the contractions of the uterus do not become regular, nor do they become efficacious and sufficiently powerful until these are removed, so that these false pains appear actually to keep back the proper contractions of the uterus, or to direct its excitability to other parts; if they do not directly weaken the power of the uterine contractions, they nevertheless render them more painful, and therefore lessen their activity. Under this head belong those cases which Von Herder, Wigand, Schmidtmüller, Stein, jun., have described, where, as Von Herder expresses himself, the pains lose their peculiar character as expulsive powers of the uterus, and assume a different type in other organs, the pains cease, and this is suddenly followed by dyspnœa, suffocation, spasms in the chest, the neck becomes swollen, there is general shivering, extreme restlessness and anxiety, paralysis, or even temporary mania. In other cases an acute pain is suddenly felt in the thighs, followed by an entire cessation of the uterine contractions. The patient describes it as if the labour pains had shot down into her thighs; sometimes she is attacked with

severe headach, during which the contractions also cease.

Cramp in the muscles of the leg is also a subject which will here demand our attention; it is a painful affection to which women are frequently liable during the latter stages of labour. It has generally been attributed to the pressure of the head upon the branches of the pelvic nerves as it enters the vagina, and, according to Mr. Burns, this cause is peculiarly liable to be brought into action "when the liquor amnii is in too small quantity; it thus confines the child, and by making more of its surface press on the neighbouring parts, may compress the nerves, and occasion cramps in the legs and thighs." Wigand, who paid minute attention to every subject of this kind, is inclined to a different opinion as to the cause of cramp during labour. He divides it into two species, differing from each other both as to their cause and intensity. The milder species may occur at any stage of labour, either from too sudden flexion or extension of the leg, or from sudden exposure of it to cold. The more severe species does not usually make its appearance until the latter part of labour, and until the head is almost entirely engaged in the vagina, occasionally lasting for ten or fifteen minutes, subjecting the patient to the most excruciating pain. That it does not always seem to arise from the pressure of the head upon the pelvic nerves, appears from the fact that it often alternates, first one then the other leg being affected. The crampy pains do not only come on exactly at the beginning of uterine contraction, but are invariably accompanied with weak and ineffective pains, so that the pressure of the head against the nerves cannot be very considerable.

Not unfrequently the head under these circumstances is found remarkably free and moveable in the pelvis. Change of posture in the thigh or leg, and active friction of the part, either with the bare hand or a warm flannel, will not only prevent a return of the affection, but considerably relieve it when present, and even remove it altogether. From these, as well as other reasons (for the further investigation of which I must refer you to the work itself), Wigand was inclined to attribute cramp not so much to the pressure of the head upon the nerves, as to a peculiar state of sympathy of the os uteri, during which the pains are prevented attaining their full degree of effect, and being, as it were, forced out of their proper sphere of action, they sympathetically implicate other parts which are more remote. Thus we see some cases of severe cramp alternating with vomiting, severe headach, &c.; such cases are generally the result of exposure to cold during pregnancy or labour, and will frequently yield entirely to a copious perspiration; generally, however, simple friction will be sufficient. The application of an opiate ointment to the os uteri, which is hard and extremely tender to the

touch, has been said to be very efficacious, but I have never had occasion to use it. Women who have an evident disposition to attacks of this sort, and have already suffered much from cramp during their pregnancy, should be strongly cautioned against exposure to cold, especially during the commencement of labour; a gentle perspiration should be encouraged by warm diaphoretic drinks, or a dose of Dover's powder. Where, however, the cramps are so severe as not only to resist these measures, but also to distract the patient by the intensity of the pain, and even threaten convulsions, if the state of the parts permits, it will be advisable to terminate labour by the forceps.

7thly. Defective contractile power of the uterus may arise from inflammation of this organ. This is generally the result of external violence and rough treatment during labour, neglect in giving assistance, or where the injurious effects of it have been increased by the improper use of heating food and drink. Thus, for instance, a woman at the beginning of labour suffers from rheumatism of the uterus, a stupid attendant gives her cordials, wine, caudle, &c., to increase the pains, and thus the disease passes into actual inflammation; the pains produce extreme suffering, and continue during the intervals, the abdomen becomes excessively tender to the slightest pressure, the vagina is dry and hot, and the os uteri extremely sensitive; the evacuations from the bladder and rectum are suppressed, and, in fact, all the symptoms of inflammation of the uterus and bowels are induced. In these cases, as I told you on a former occasion, the lips of the os uteri are sometimes so swollen as to be mistaken by an unpractised hand for the membranes.

I shall now proceed, gentlemen, to lay before you some general rules for the *treatment* of this species of dystocia. Excessive protraction of labour from insufficiency in the expelling forces, *may* be dangerous to the mother and child, but far less so than when the cause lies in a want of proportion between the head and pelvis. This faulty condition of the expelling powers which I have now been describing, occurs very frequently in tender, delicately brought up females, and is by no means so important as the inexperienced would suppose; it occurs especially in primiparæ, and is generally a result of the too early escape of the liquor amnii, which so frequently happens in first labours. Beginners should be cautious not to listen too readily to the complaints of the patient, or be too precipitate in giving assistance. If, however, the insufficiency of the expelling powers be in a much greater degree, and the progress of labour be too long protracted, more especially where the pains are not only inefficacious, but come on so frequently as to prevent the patient from having any rest; when these pains produce much suffering, especially in delicate irritable habits,

the consequences are *very* important, and vary according to the intensity of the cause. Under this head come exhaustion, weakness, dangerous congestions, hæmorrhages, protracted expulsion of the placenta, hour-glass contraction, &c., &c. Of these the more important are hæmorrhage, convulsions, and the diseased state of other parts which are especially under the influence of labour.

Difficult labour from absolute insufficiency of the uterine activity (without reference to what assistance art is able to give), demands for itself increase of this activity, until the uterus has overcome the natural obstacles of labour; but since art is seldom able to answer the demands of nature, and since we are unable to excite the activity of the uterus at will, or in the necessary degree, or without injury, and there do occur cases where art is of no avail against this atony of the uterus, the accoucheur frequently finds himself compelled to excite its activity relatively, viz. by diminishing the resistance, or by combining both indications together. As long as the natural powers are sufficient, we should hesitate in having recourse to mechanical ones.

It is, however, very difficult in many cases to draw the line of demarcation between the two species of treatment, or even to determine *where*, or in *what* degree, he must have recourse to art. Besides an accurate knowledge of the means which he possesses of rendering assistance, a knowledge of the peculiarities of his patient's constitution, of the duration of labour, of previous injuries which she has suffered, of the character of her former labours, &c., becomes indispensably necessary. Irregular or unnatural protraction of labour, from atony or debility of the uterus, the result of organic changes in it, demands artificial delivery.

In a less degree of weakness of the uterus, or where this is the result of general weakness, a little peppermint or cinnamon water, or some camomile tea, a cup of coffee, or a little warm wine, &c., are of service. Circular friction upon the abdomen over the fundus uteri, friction with volatile liniment, change of posture, turning from one side to the other, walking about the room, a warm bath, sitting over the steam of hot water, &c., will assist in renewing the pains. Madame La Chapelle has recommended pressing the palm of the hand against the inferior part of the labia and perineum as a means of exciting uterine contractions, but I have never tried it. Among the most active medicines which excite the energies of the uterus, are tinct. cinnamomi, spiritus, ætheris sulph., spiritus ammoniæ succinatus, valerian, castor, secale cornutum, borax, &c. Plenck, of Vienna, has recommended the cinnamon, but it was well known to the midwives of the continent long before his time for its power of exciting uterine activity, and it entered into the composition of almost all the nostrums for that purpose in former times. It certainly does possess a specific power in exciting the uterus to contraction. The way in

which I have seen it exhibited abroad is to give a dessertspoonful of the tincture; it is rather a hot dram, and is just the thing to suit our English gin drinkers. Borax had also a great name fifty or sixty years ago; it then fell, I know not why, into disrepute, and, I am told, has been lately again brought into notice. Of late years the secale cornutum has been recommended as a remedy for exciting uterine contraction; but it is no new remedy, for it has been known as such upon the Continent, in France, and Germany, time out of mind. In Germany it is called *mutterkorn*, which sufficiently indicates that its properties were understood at a very early period. The secale cornutum, or ergot of rye, has been chiefly used in cases where the os uteri was fully dilated, but the head remained in the external passage from the pains not being sufficiently powerful to expel it; but it is capable of inducing contractions of the uterus before the os uteri is at all opened, or even in any period of pregnancy, as I have before shown you. It may be exhibited either in the form of powder, infusion, or tincture. The powder may be given every quarter of an hour for three successive times, in doses of from ten to twenty grains, in a little cold water. This appears to be by far the most efficacious form; and if your ergot has been kept in a warm place, exposed neither to the air nor the light, it will seldom fail to show its effects. The infusion is made by infusing ʒj in half a pint of boiling water, and giving it at three doses; but I have reason to think that the boiling water frequently injures its efficacy, and therefore prefer the powder in cold water. The tincture I have used in various doses, and cannot say that I ever saw the smallest effect produced by it.

You should be cautious in not confounding diminished action of the uterus from plethora, spasm, &c., with weakness of that organ, and, above all, in distinguishing where it is in a state of quiescence from where it is exhausted. It frequently happens, that after powerful contractions, and where the uterus has been for a considerable time in a state of great activity, it sinks into a state of repose, and after the patient has enjoyed a refreshing sleep, it will again awake, as it were, to astonishing exertions; or, as Wigand says, "the pains during the same labour may cease once, twice, or even oftener, and yet, after a little rest, will return with renewed strength."

In directing our practice, we should never let it out of our sight, that the success of labour not only depends upon the delivery of the child, but also upon the safe expulsion of the placenta, which, under most circumstances, is much the more dangerous of the two; that with respect to this stage of labour the premature evacuation of the uterus from the improper use of artificial assistance is quite as injurious as exhaustion of the uterine power from waiting too long, or from the immoderate use of irritants, &c. This fact is of very great importance, for more women die during the last

stage of labour than during all the others put together.

We should be especially careful not to be too officious before the membranes are ruptured, when, otherwise, no dangerous symptoms, as convulsions, hæmorrhage, &c., have appeared. "I am always easy with a woman," says La Motte, "let her labour be never so long, provided the membranes are not broken, never opening them myself unless some unlucky accident at first, or which is to be feared afterwards, forces me to it." "All that we can do, where the membranes are long ruptured, is to wait with patience without disturbing the patient, resting satisfied with making her take something easy of digestion, as a little soup or broth, to revive nature." Where the membranes have not been ruptured until the os uteri is fully dilated, the whole business of parturition assumes a perfectly different aspect the moment this takes place. The progress of labour, which was at first slow, now frequently becomes remarkably active and rapid. In cases, however, where the os uteri is fully dilated, and where the pains are slow and weak, the artificial rupture of the membranes is a means of strengthening them and hastening the progress of labour, especially in women who have already had children; but this should on no account be ever put in practice until the os uteri is fully dilated.

In plethora uteri, venesection of course is the chief remedy; the general rules for the treatment must be the same as in cases of congestion of the blood to other parts. It must be strictly antiphlogistic, and the patient must be kept cool; cooling drinks and saline draughts may be given, and the rectum evacuated by means of a saline injection. Nitre is frequently prescribed internally on the Continent in these cases, and appears to possess a peculiar action in cooling the system, which does not seem to be generally known in this country.

Rheumatic affection of the uterus and adjacent parts requires the exhibition of gentle diaphoretics, according to the degree of the affection. If a plethoric or inflammatory state be also present, it will be necessary to premise a venesection, and follow it up with cooling medicines: as diaphoretics we use the liquor ammon. acetatis, liq. antim. tart., sp. ammon. aromat., Dover's powder, &c. and combined or not with any of the neutral salts. For her common drink the patient may use tea, camomile tea, weak lemonade warm, &c. Whole baths, or semicupia, sitting over the steams of hot water, or warm fomentations, are of good effect; and, in obstinate cases, a sinapism applied for a short time to the abdomen will give great relief. The patient must be well covered with bedclothes, and remain so as long as the perspiration lasts; and care must be taken that she does not cool herself too soon.

Colic pains must be treated according to the variety of their cause. If they assume a

rheumatic character, the treatment which I have just described must be put in practice; if they proceed from flatulence, carminatives with antispasmodics are indicated, as for instance, peppermint, fennel, or aniseed water, with a little sp. ammoniæ arom. &c. If the pains be spasmodic, opium, Dover's powder, valerian, castor, &c. will afford relief, or an injection of camomile infusion, with a little laudanum. Power, in his work on midwifery, has highly recommended friction on the abdomen with the hand, he says, "the application of friction will rarely be found a painful operation to the patient, on the contrary, if artfully commenced, it will both surprise and gratify her. In some the improper action will be removed almost instantly, and as it were by a miracle, so that a case which has been protracted for the greater part of a week under the most intense suffering, without the least progress, has been happily terminated in fifteen or twenty minutes from the first commencement of the friction." If these colic pains proceed from crudities in the stomach or intestines from dyspepsia, distension from fæces, &c. laxative medicines or purgative injections will be required.

Inflammation of the uterus requires strict antiphlogistic treatment, and terminating the delivery in the gentlest manner as quickly as possible. Venesection must of course be had recourse to; but we must not wait for the action of antiphlogistic remedies, and the consequent facilitation of labour; for the presence of the fetus in the uterus is itself an irritation, nor can this cause of irritation cease to act until the labour is terminated. Here also the injection of an infusion of hyoscyamus, cicuta, camomile, &c. will be very beneficial, after which, a flannel wrung out of the same infusion should be applied to the external parts of generation*.

CLINICAL LECTURE

OF

M. ROSTAN.

Delivered at the Hôpital de l'École.

Diseases of the Nervous System.

It being understood that M. Rostan was about to treat on the maladies of the nervous centres in a series of lectures, the pupils in great numbers flocked to the amphitheatre, desirous of acquiring the clear and concise information which M. Rostan so well knows how to communicate to his auditors. Extracts from these progressive lectures shall from time to time appear in our journal.

Having in a few words recalled to the attention of his auditors the fundamental principles of organic medicine, namely, that all the

* It is but right to mention, that a considerable portion of this Lecture is taken from my notes of Professor Naegele's Lectures.—E. R

organs in the living man are in exercise; that, if these organs be sound, their functions will be regular, and in their physiological normal state; but if the organs be deranged, their functions are irregular, in a pathological state, and reciprocally; M. Rostan proceeds to apply these axioms to the maladies of the nervous centres, proposing to elucidate each pathological perturbation of which that organ is susceptible. But first it was necessary to enter into the discussion of a still litigated opinion, to demonstrate that the brain is, *bonâ fide*, a many powered organ, presiding over and directing different acts.

According to M. Rostan, it is incontestible that each function of the brain and spinal marrow is produced by a particular organ, acting, in a manner, isolately, as we see in deranged persons, the trouble in the brain is no impediment to their free and voluntary movements; and on this point he cites the works of MM. Foville, Delaye, and Pinel Grandchamp, all of whom thus isolate in its employment every portion of the brain. Though founded on a manifest error, and unsatisfactory in many particulars, the importance and value of these works, in all that has reference to the functions of intelligence, cannot be denied.

Alterations of Motion.—Alterations in motion may be general or partial, persistent or momentaneous, and of innumerable kinds; hence semeiologists have established a great diversity of motions. But prior to the study of these alterations of motility, due weight must be given to these considerations. Motion may be as readily altered by lesion of the organ that executes, as by lesion of that which commands, or of that which transmits the command; in short, by the executive as readily and certainly as by the legislative powers of the brain.

If the action of the muscles is frequently augmented in maladies of the nervous centres, it is not so in the greater number of affections to which man is subject. In proof of this, it is only necessary to recal the symptoms which characterise the progression of the most part of acute affections, of small-pox, for example, and more especially of typhoidal fever.

The trembling of the members may arise from a variety of causes; from over dosings of alcohol and other liquids, mercurial preparations, from the action of cold, even when the age is not advanced, &c.; and are we to believe that these, and all such results, are independent of all organic lesion? Bichat and his school see nothing in these phenomena but perversion of contractility; Rostan, the effect of organic modification, more or less appreciable, of the nervous centres. Taking the trembling of senility as example, he asks whether the modifications which the encephalic substance undergoes from the progress of age, must not react upon the powers of motility; he specifies the density

of an aged brain, its tendency to a brownish coloration, the shrinking which it seems to undergo, the sort of doubling which it suffers, consequent upon the thickening of the diploe and of the sulci formed by the internal table of the bones of the cranium. He further dwells upon other organic changes easily observed in the principal nervous branches, and then pronounces, without fear of contradiction, that these functional disorders issue from an appreciable organic modification.

The stiffness and contraction of the limbs, considered by some authors as the peculiar sign of ramollissement of the nervous centres, accompany also cerebral hæmorrhagia, as M. Rostan has many times verified. Convulsions have been distinguished as tonic and clonic; in the former, the contraction of the muscles is continued and permanent, with complete immobility; in the latter, contraction and relaxation are alternated, and the convulsed parts agitated by continual shocks.

To tonic convulsion belong tetanus and its varieties. In this malady there must be organic alteration, since the functional derangements are permanent. For some time this truth was doubted. There are certain observers on whom the results from dissection are wholly lost; they either see not or do not choose to see the numerous lesions which autopsy discloses to the most inept observer. M. Rostan, who is certainly not of that class, is of opinion that the organic alteration, triumphant in tetanic phenomena, has its seat in the envelopes of the spinal marrow. The alterations which the nervous centres undergo in catalepsy and chorea, fugaceous and difficult to define as they are, are not the less absolute and real. It is principally in inflammation of the meninges of the brain, or when these membranes are inflamed, together with the encephalon, that cephalalgia manifests itself. Then we know from experience that, even in typhoidal affection, there is alteration of the nervous substance; and if, under all circumstances, this alteration is not easily appreciable, the fault lies rather in the imperfection of our anatomical means of exploration than in the principle of organicism which a few isolated facts cannot overturn.

Again and again we hear that, in the victims of epilepsy, the organic alterations found have no bearing upon the previous symptomatic derangements, and this with intent to overturn the doctrine of M. Rostan, who maintains that convulsions cannot supervene without a corresponding modification of the nervous substance. But for the very reason that these convulsions take place at intervals more or less distant, it is clear that the organic modifications on which they depend cannot be persistent. Thus, instead of overturning the base of organic medicine, these clamours tend to strengthen it.

It is impossible to verify the nature of the organic alteration which gives birth to epileptic

fits. MM. Bouchet and Cazauvielh, in the work they have published on the subject, have mistaken one of the effects of the malady for its cause. They have forgotten that the congestion which takes place towards the meninges and towards the brain during the access, arises from the same cause as that which reddens the face, limbs, &c. Neither can the cartilaginous state of the envelopes of the marrow account for the epileptic accidents, as, once again, we observe that the organic alteration which determines epilepsy must, like the symptoms of the malady itself, be fugacious.

Paralysis, says M. Rostan, presents one of the most interesting phenomena that can be observed; and, by a just appreciation of it, the diagnostic of cerebral affections may in a great number of circumstances be most happily established. Yet modern pathologists, some of whom are still our cotemporaries, have not deduced from this functional perversion the consequences it so rigorously indicates. For a long time paralysis was considered a particular malady, independent nearly of all organic lesion of the nervous centres. MM. Pinel, Landré, Beauvais, and others shared this fatal error—fatal, I say, because it gave rise to the grossest therapeutic misapplications. M. Rostan here refers to the researches of Mauduyt and Hallé, who, in 1785, were accused by the Academy of Sciences of experimenting with electricity against paralysis, from which it is clear that the Academy then considered paralysis as a particular malady. Also in the work just named, there is no mention of the organic cause which originates paralysis. In the present state of the science it would be useless to endeavour to prove that the therapeutic agent must, in some cases, sensibly aggravate the malady. According to M. Rostan, paralysis is as sure a guide to the diagnostic of the affections of the nervous centres, as the different râles and other sounds furnished by auscultation of the chest are of the maladies of the thorax.

It is only since 1815 that anything like a correct view of the subject has been taken; and to this, we are bound to say, the researches of M. Rostan have mainly contributed.

When paralysis is general, when it affects indistinctly all the agents of motility, it does not constitute a sign as positive as when it is partial. The whole brain is then compromised, unless the lesion be seated in a central organ—the mesocephale, for example. In congestions, paralysis is general; in meningitis, which terminates in an abundant serous suffusion; in syncope, asphyxia, inebriety, hysteria, epilepsy.

Reverting to lesions of the mesocephale, M. Rostan avails himself of anatomical and physiological data to determine the influence of that organ on a general paralysis; and he supports his facts by observations made at the bedside of the patient.

General paralysis may depend on cerebral congestion, on an abundant hæmorrhagic overflow—two causes capable of determining the compression of that soft and pulpy organ. In the one case it supervenes suddenly, but in a few hours, or at furthest, in a few days, the patient again enjoys his motile powers;—not so in the other.

A knowledge of the accidents which precede general paralysis suffices for the diagnosis of meningitis, as the integumentary paleness, absence of pulse, and slowness of respiration in syncope.

In asphyxia, as in narcosis, a knowledge of the determining influence, with other special signs hereafter to be mentioned, assist in appreciating the organic modifications which determine paralysis.

The alcoholic odour of the patient's breath, and the characteristic vomitings, sufficiently mark the paralysis arising from inebriety.

In hysteria and epilepsy an assemblage of convulsive accidents ever precedes the total resolution of the powers.

In cerebral hæmorrhage there are no precursive phenomena: the paralysis is persistent. The diagnosis of the seat of this sanguine overflow must be sought, by ascertaining whether the paralysis was at first local or general; if the former, the probabilities point to the ventricular cavities and compression of the encephalic mass; if the latter, to hæmorrhage of the central portions of the brain.

There are few examples of general ramolissement of the nervous centres; but, in every case hitherto known, paralysis has been preceded by evident signs of morbid action.

M. Rostan then passes on to local paralysis, which, he says, originates opposite the encephalic alteration. This fact some contest was known to all antiquity, and its explanation is attributed to Herophylus. It has been said, that when there is hæmorrhage in the posterior lobes of the brain, it determines paralysis to the side corresponding to the affected lobules. But M. Rostan justly observes, that the most earnest seeker of truth on this point may be easily mistaken, as he has many times found; and that he attaches little importance to opinions which oppose the long-established fact, that the lesion of a cerebral hemisphere causes functional perversion in the side *opposite* the affected hemisphere.

It is by no means rare to find paralysis limited to an arm or a leg, &c. MM. Foville and Pinel-Grandchamp explain this phenomenon by the influence of the corpora striata over the movements of the pelvic member, and that of the thalamus opticus over the movements of the thoracic member. That there exists in the brain distinct organs, each destined to govern distinct movements of each member and each part of the human frame isolately, M. Rostan considers a verified fact; but he believes that researches, hitherto, have not been sufficiently minute to be satisfactory on this point.

Again, paraplegia well merits the attention of physicians. It may be complete or incomplete; affect first one then the other of the lower extremities, or simultaneously; and it depends most frequently on some alteration of the spinal marrow; and though primitively partial, it fails not to become general when it becomes at all connected with the nervous fibres coming from the spinal marrow. Paralysis *croisée* depends upon alterations of structure in different points of the hemispheres of the brain. It is very difficult at all times to identify the exact seat of the organic lesion, particularly when the paralysis is confined simply to the organs of sensation.

With respect to paralysis of the tongue, it is necessary to establish a distinction which may reconcile the facts, apparently contradictory, which have been advanced by observers worthy of credit. Paralysis of the tongue is often suspected, when there is only oblivion of words; and the movements of the tongue may be affected without the slightest alteration in the powers of the memory. Thus may be reconciled the opinion of Bouillaud, who places the memory of words in the anterior lobes of the brain, with that of Foville, who avers that in stuttering persons there is manifest alteration in the cornu Ammonis.

Paralysis of the œsophagus is a disease of very rare occurrence, and the point in which the lesion occurs has not as yet been exactly determined. M. Rostan has witnessed many cases of this affection. "A continued and minute study," he observes, "of the progress and phenomena of paralysis, greatly contributes to the diagnosis in affections of the nervous centres."

Thus, in cerebral hæmorrhage, the invasion of paralysis is sudden, in ramollissement progressive, and ever preceded by particular accidents, which shall be hereafter named. The insidious march of paralysis announces the existence of ramollissement, or of profound organic alteration of the brain. Its progress there suffices to distinguish cerebral congestion or hæmorrhage at a certain period of its existence.

Paralysis, succeeding a sanguine overflow in the nervous substance, is sometimes persistent, and then there must be some laceration to a considerable extent of the encephalic mass.

Each and every of the preceding facts and propositions have been contested; paralysis without alteration of the nervous centres, and alteration of the nervous centres without paralysis have been cited. But these averments, incomplete in themselves, do little more than lead to the admission that, with the nervous centres, as with every other organ of the human mechanism, there exists a few exceptional cases of latent affections; and in these our present mode of investigation is not sufficiently minute to detect the cause.

Conceding thus far to facts extremely rare and sufficiently incorrect, proves the readiness with which M. Rostan would yield to those

which bore the genuine stamp of truth, and must, therefore, increase our confidence in all he states.

The Professor terminated his brilliant discourse by enumerating the different paralyzes produced by the action of electricity, of lead, mercury, &c. and confessed, without hesitation, that in these cases the nervous pulp seemed not to have undergone any sensible modification; but at the same time maintained that there must nevertheless be some organic change in the nervous centres, which further researches would no doubt reveal.

Review.

The Clinique Médicale; or Reports of Medical Cases. By G. ANDRAL, Prof. to the Faculty of Medicine of Paris, Member of the Royal Academy of Medicine, &c., &c. *Condensed and translated, with Observations extracted from the writings of the most distinguished Medical Authors.* By D. SPILLAN, M.D., Fellow of the King and Queen's College of Physicians in Ireland, Member of the Association of the Fellows and Licentiates of the College of Physicians, and formerly Physician to the Dublin General Dispensary. London: Henry Renshaw.

THE work before us, if not unparalleled in its kind, has, assuredly, not an equal on the subjects upon which it treats. "Reports of Medical Cases" have been received by British practitioners in general, we fear, as isolated facts, accumulated in wondrous confusion, often without their being applied to the elucidation of great and general principles, or with no other object, perhaps, than to fill books, which the author's invention or genius was incapable of executing. To accumulate facts requires neither genius nor great abilities; it is in the appropriation of facts to the elucidation of principles where mind is required. To generalise facts in physics or in physiology—to prove the bearings of each part on a certain point—to estimate the relative value of each—to cull the useful and reject the superfluous parts—demands great powers of perception, a judgment correct, and a disposition to state facts and nothing but facts. The author of the *Clinique Médicale* enjoys these qualities in a pre-eminent degree—the whole profession accords him this merit. In our review of the present translation we shall not be sparing of our extracts. In doing so, Dr. Spillan will excuse the liberty we take with his labours, for the object is to show to our readers the character of the work, by selecting a few specimens of the manner in which the author has treated his subject, and the translator has fulfilled his duties.

Prospectus.

"The merits of the original work—a condensed translation of which is now in progress

of publication—are so universally acknowledged, and its character is so well established, as forming an era in the history of Medical Pathology, that it is altogether unnecessary to say anything regarding it in the way of eulogy. It contains a series of select cases and observations eminently suited to illustrate the history and nature of those diseases which are of most frequent occurrence in the department of *Internal Pathology*. The manner in which these cases are arranged, and the mode in which the facts furnished by them are generalised, entitle it to rank as a *Complete System of Clinical Instruction*. The work will be published in five parts. Each part consists of two great divisions, the first containing cases to illustrate the phenomena and treatment of the disease, with observations and inferences on each to elucidate its pathology; whilst the second consists of general deductions from the facts recorded in the first division.

“Every thing of practical value in the original French has been scrupulously preserved in the present English edition, those cases only having been omitted which were not calculated to excite the interest or reward the attention of the British reader. The opinions of the most distinguished medical writers, foreign and domestic, whenever it appeared necessary to explain more fully the pathology and treatment of the disease, have been subjoined in the form of notes.

“The work will be printed from a new type, cast expressly for the purpose, and will be stereotyped; and whenever in the progress of Medical Science improvements in Pathology shall present themselves, they will be given in the form of *Supplement*, by which means the purchaser of the work will be secured from any inconvenience arising from the publication of subsequent editions. Each of the three great divisions of the work will be complete in itself; the first part containing Diseases of the Encephalon; the second and third those of the Heart and Lungs; and the fourth and fifth Diseases of the Abdominal Viscera.”

The first part of the work treats on the diseases of the encephalon and its membranes, as it is perceived, and the quotation from the prospectus develops the character of the work.

This is not a system of practice of physic to teach tyros in medicine the symptoms of the various diseases incident to humanity, nor is it a text-book for practitioners, like Cooper's Surgical Dictionary, but it is a work of higher value: it is the record of extensive experience in practice by one of the most able physicians of which Europe can boast. From a man imbued with all the medical philosophy of his day, a minute anatomist, a profound physiologist, one who possesses industry to collect facts, who watches the operations of nature in disease on an extensive scale, and with such powers, and from such data, we are warranted, almost *a*

priori, to expect great results. We are not disappointed. Andral has the faculty of making anatomy and physiology, pathology and morbid changes, bear reciprocally upon each other. When investigating post-mortem appearances, he never seems to forget healthy structure; and when reasoning upon pathological phenomena, physiology seems ever in his mind. This may appear eulogistical, but those who have derived the same pleasure from his writings that we feel to have derived, will not make such a charge. Wanton eulogy we are not in the habit of bestowing, but where approbation is deserved, we heartily award it.

The following is the commencement of Section II.

“*Diseases of the Arachnoid and Pia Mater*.—There are few diseases whose symptoms present so many varieties and so many individual differences as acute inflammation of the meninges. Are there well marked signs, by the aid of which we may readily distinguish during life inflammation of the meninges lining the upper surface of the brain from that connected with the lower surface of this organ? Are there any special functional disturbances appertaining to inflammation of the membrane lining the parietes of the ventricles? By what signs can we recognise inflammation of the membranes lining the spinal cord? Whatever be its seat, can acute meningitis be distinguished by its symptoms, either from the other acute affections of the encephalon, in which this organ is found materially changed, or from those very frequent cases in which irritation of the brain or its coverings, merely sympathetic of irritation of some other organ, leaves no trace of its existence in the dead body? In a word, in the dead body itself, what are the anatomical characters by the aid of which we shall be enabled to affirm that there really was acute meningitis in the cases where, during life, symptoms existed which seemed to belong to it? Such are the questions as yet undetermined in science, in the solution of which we think the following cases will assist.”

We shall now quote a case at page 12, which gives a minute detail of the symptoms, the treatment, the morbid phenomena, and the subjoined remarks.

“A boy, seventeen years old, felt for the preceding fifteen days violent pains of the head, and experienced for the last two days only commencing weakness in the lower extremity of the right side, when he entered the hospital on the 24th July, 1822. His state then was as follows:—Countenance very pale, slightly puffed; pupils natural; vision and intelligence perfect; the lower extremity of the right side seems to the patient heavier than the left. Since the preceding night only he began to feel some difficulty in moving the upper extremity of the right side, and it seems heavier to him than the other; the sensibility of these limbs, however, is unimpaired; pain of head very acute, and occasionally extorts

loud cries from the patient; pulse irregular, but not frequent; respiration high, and the intervals between each inspiratory movement unequal (twenty leeches behind each ear, sinapisms to the legs). A few hours after the visit the patient fell into a profound stupor. The following morning, 25th July, the coma disappeared; intelligence perfect; answers precise; pain of head continues; paralysis of the right side increased; pulse very irregular, and fifty each minute; vomited a green bitter matter twice or thrice during the night; tongue still the same (thirty leeches to the neck, two blisters to the legs). On the visit of the 26th sunk into a profound coma; his countenance, however, indicates pain, when the limbs are pinched; pulse preserves its slowness and great irregularity; skin cool and moist.—A blister to the nape of the neck. On the 27th, eyes open, but immovable; vision appears to be gone; he seems not to understand anything, and articulates not a word.—Stimulating frictions to the limbs, ice to the head, sinapisms to the legs. On the 28th, pulse ninety-six. On the 29th, other symptoms appear; the eyes and face are become the seat of slight convulsive twitches, which are repeated at short intervals; coma not increased; he stares at those questioning him, without answering; distinguishes objects well; complains very much; retracts the arm a little when it is pinched; this arm when raised falls as an inert mass, whilst he holds the left arm raised without any effort; pulse eighty; the respiration proportionally more accelerated than the circulation.—Ice to head continued. On the 30th, the intelligence returned, the patient answers questions, hears and sees perfectly; pulse ninety-two, and the respiration still accelerated; paralysis of the right side continues. On the 31st, the patient, whose state for the last two days was so perceptibly improved, relapses into coma; during the day the respiration, which is now accompanied with a r le, becomes more and more accelerated, and the patient expired, as if in a state of asphyxia, during the night.

Post-mortem.—The pia mater covering the upper surface of the two hemispheres was infiltrated with a thick purulent layer, the arachnoid itself being in its natural state. On the left, below the pia mater, near the great interlobular fissure, several circumvolutions present a bright red appearance; some even present a uniform red tint; the tissue of the circumvolutions in other respects natural; outside the left lateral ventricle, on a level with the ancyroid cavity, the cerebral substance contains a tubercle the size of a large pea, developed in a mass of grey substance. Tubercles were found in great numbers in the two lungs.

Remarks.—In this case the membranes were not only injected, they were also the seat of purulent secretion. One of the most striking of its symptoms was the paralysis of one side of the body, which developed itself from the

commencement of the disease, and went on increasing. It seemed as if the left hemisphere of the brain was subjected to some compression, and yet such did not appear. The purulent layer between the arachnoid and brain was on both sides; on the left only some of the circumvolutions participated in the irritation of the membranes, inasmuch as they were considerably injected. If that were the cause of the paralysis, why was it not preceded by a state of contraction of the limbs, as happens very often in inflammations of the cerebral pulp? Beside this permanent symptom we find others remarkable for their appearing and disappearing alternately; thus the intelligence went and returned; the very evening before death it was quite perfect; still it is very probable that these lesions in the pia mater, which we discovered the following day, existed at that time. Several times also the patient fell into a state of coma, which is considered as appertaining to inflammation of the meninges covering the lower surface of the brain; and this coma was also moveable as the delirium. The sight also went and returned. Was it not strange that these functional disturbances were but transient, whilst the lesions causing them were permanent? In such a case it must be admitted that these symptoms depended less on the cerebral membranes themselves than on the way in which the cerebral pulp was affected at different periods of the disease by the irritation of the membranes enveloping it. Thus in pericarditis the variability, mobility, and oftentimes also the transient nature of the symptoms depends on this, that the heart in all persons, or in one and the same person, during the entire course of the disease, is differently affected by the irritation of its investing membrane. No alteration in the pulmonary parenchyma, nor in its investing membrane, accounted for the very great disturbance of the respiration that was observed. The symptom, as also the vomiting that took place, must have depended on the cerebral affection."

After giving cases of meningeal inflammation in the cranial cavity, with judicious observations, we are brought to affections of the meninges of the spinal cord. We have in each discussed "Lesions of the Dura Mater" (and Theca), "Lesions of the Tunica Arachnoides," and "Lesions of the Pia Mater."

At p. 34 is an interesting case, and some useful comments.

"A man, twenty-four years of age, of rather a strong constitution, entered the Hotel Dieu, the 19th of October, 1823, stating that he had been ill for the last five or six days. He complained of no particular part as being the seat of acute pain; his illness was general, but slight; still his countenance was expressive of suffering; his answers were slow; lips seemed to tremble, as when a person is going to cry; no appreciable symptom of fever; heat of skin natural; no symptoms of gastro-intestinal irritation. He remained for two days

without undergoing any change. He arose out of bed and walked through the ward, but not having passed any urine since entering the hospital (three days), the catheter was introduced; bladder very much distended. On the 24th Oct. (fifth day) M. Dance examined the patient more particularly; his countenance still expressive of suffering; seems always as if going to weep; answers slow and vague, when questioned regarding his state, about which he does not furnish any more information; bladder still distended; on raising the lower extremities he screams with pain, particularly on moving the right lower extremity; pinching felt equally in both limbs; sensation also perfect, but he cannot raise them; he cannot even extend them after they have been flexed; they fall back on the bed as inert masses if left to their own weight; they are deprived of motion but not of sensation. The vertebral region was then examined, which presented nothing unnatural; it was remarked that he could not replace himself on his seat; that he suffered on the least flexion of the spine, and that the neck was slightly retroverted; on attempting to incline it forward, it could be done only to a certain degree, and by causing the patient some pain; he was now very irritable. In the upper extremities motion and sensation underwent no change; pulse has some frequency and a little hardness; skin hot; tongue natural; no stool for the last five days; no rigidity nor convulsions in the lower extremities (venesection, lavements). On the 25th, same state; distension of the bladder; pulse frequent; skin hot; limbs painful when moved, particularly that on the right side; same state of countenance and slowness in the association of his ideas; same pain on turning the patient (another bleeding). On the 26th the same appearance; pulse now very small and more frequent; bladder still distended; urine fetid, turbid, and reddish, contains a gaseous fluid which is heard escaping by the catheter, which is blackened by remaining even for a short time in the bladder; blood last drawn buffed and cupped. In the evening state worse; pulse nearly extinct and very frequent; still the heart beats with considerable strength; lower extremities sensible, but cannot move, and are very painful when any one attempts to move them. This paralysis and morbid sensibility begin to appear in the upper extremities, which present a slight rigidity; trunk and neck rigid; countenance still expressive of suffering; answers slow but precise; tongue moist; evacuations from the bowels scanty. On the 27th same state; parietes of the bladder have now lost all contractility; upper extremities weaker; one stool (sinapisms to lower extremities). On the 28th, patient now much worse in every respect; the contractile power of the upper extremities weakened; they are half-flexed, and evidently rigid, as are the entire trunk and neck; head somewhat inclined backwards and to the left;

right pupil more dilated than the left; respiration slow; motions of ribs incomplete; bladder still distended: escape of fetid gas with the urine through the sound; no stool. Died on the 29th, the tenth day of the disease.

“ Post mortem thirty hours after death.—Cerebro-spinal cavity.—Marked injection and distension of the spinal vessels; membranes healthy; lateral ventricles very much distended, containing about three-fourths of a glass of serum, somewhat opaque; the other ventricles were also distended. The vertebral canal being opened through all its extent, we observe, external to the dura mater, in the cellular tissue surrounding it, a network of vessels injected with blood. This membrane seemed very much distended and immediately applied to the cord, which already indicated a particular development of the parts contained in it. The dura mater having been cut into through all its entire length, the cord appeared covered by a gelatinous layer, slightly yellowish, four or five lines thick, which was applied immediately over the pia mater. This layer was very thick towards the lumbar enlargement of the cord, and there also the yellowish colour was deeper; it gradually diminished in thickness in ascending as far as the third or fourth cervical vertebra, where it ceased altogether; there was no trace of it on the cauda equina; it was less thick and less perceptible on the anterior surface of the cord than on the posterior surface. This gelatinous layer was situated between the pia mater of the cord, and the corresponding arachnoid reflexion; that which lined the dura mater was also covered with a very delicate false membrane, granulated, and of little consistence. This puriform, concrete substance, subjacent to the arachnoid, was not liquid, whether by reason of its tenacity, or because it was contained in the meshes of the sub-arachnoid cellular tissue. The lower part of the spinal canal, beneath the arachnoid, contained four or five spoonfuls of opaque serum.

“ Thorax.—Lungs adhering at all points of their surface, by organised cellular bands of long standing; the right lung posteriorly, was evidently in the first degree of hepatisation; its tissue friable and gorged with blood; heart natural.

“ Abdomen.—Mucous membrane of the stomach plaited, grey, slate-coloured, and even somewhat blackish, for a considerable portion of its extent; in some parts it was studded with red dots, as if from ecchymosis; that of the intestines was very much injected, reddish, and the intensity of this colour, which occupied the lower fourth of the intestine, went on increasing as far as the ileo-cæcal valve; the mucous membrane of the bladder was thickened, reddish, slate-coloured, evidently inflamed, and filled with thick, fetid urine.

“ Remarks.—This case presents, in a manner, the complete history of spinal meningitis, and the symptoms of this inflammation were, as we see, conformable to the

lesions found on the dead body; the invasion of the disease was obscure; the patient remained four days in the hospital before we were able to determine what his disease was. The first four days he arose out of bed and walked about the ward; so that it is evident the locomotive powers were not affected till the fifth day; up to that period paralysis of the bladder and retention of urine were the only symptoms which could create any suspicion of lesion of the spinal cord or its membranes; the functions of the intestines were at the same time destroyed, and constipation existed nearly from the commencement of the disease till death. Paralysis of the motive power of the lower extremities, with morbid exaltation of the sensibility, are the phenomena which then appeared, and to which were joined rigidity of the neck, inflexibility of the trunk, pains in the trunk and limbs on moving these parts. Such was the series of the symptoms which manifested themselves successively in the course of the spinal meningitis. Again, if we consider the peculiar appearance of the countenance, the difficult association of ideas, the slowness of his answers, which were noticed from the commencement, it may probably be supposed that the cerebral lesion preceded that of the membranes of the cord: so, in fact, it appears to me; but the changes found in the encephalon, and which are also entirely conformable to the state of the cerebral functions during the disease, were not of a nature to have influenced the progress of the spinal meningitis; they probably contributed to throw obscurity over its first progress. What makes it probable that they could not exercise any influence on the progress of the spinal meningitis, is, that the latter manifested itself by symptoms which proved its ascending progression, and its commencement in the lower portion of the cord. It may be remarked, that the neck becoming rigid, and the upper extremities losing their strength, were subsequent to the paralysis in the motion of the lower extremities. The muscular movements were abolished in the bladder, the intestine, and the lower extremities, whilst the upper extremities had lost but a portion of their motive power; and the pseudo-membranous layer was found, in the dead body, much thicker inferiorly than superiorly, which seemed to indicate that the inflammation had been of longer duration, and of a less recent date in the former region. The pain felt by the patient on moving the limbs or trunk, may, perhaps, be explained by the slight dragging, or shaking, which the inflamed membranes of the cord then suffered; the same phenomenon being also observed in pleuritis, where the slightest pressure increases the sufferings of the patient. The involuntary contractions of the vertebral muscles, which rendered the spine like an inflexible stock, seem also the result of those instinctive motions which we so often ex-

ecute for the purpose of avoiding or preventing pain. The vertebræ, by becoming fixed one upon the other, prevented the spinal membranes from experiencing so much dragging. The morbid exaltation of the sensibility seems to be one of the characters of spinal meningitis.

“According to Lallemand, the sensibility is not as often abolished as the power of motion, because the nervous centres are in two very different physiological conditions in the production of motion and of sensation; they are active in the performance of the former, whilst for sensation they are merely passive; they only receive the impression. The rigidity and semi-flexed state of the upper members observed in this case support M. Lallemand's opinion, who considers convulsion and rigidity of the limbs as a symptom of inflammation of the coverings of the nervous centre. In this case, traces of inflammation were found in the lungs, stomach, and bladder. The state of the lungs may be easily accounted for by the difficulty of the respiration during the last period. The state of the stomach and intestines gave rise to no symptom, except we refer to it the burning heat of skin, and the great thirst. We are inclined to think that those inflammations so often met in these cases are the effect of sympathetic reaction, and of the numerous connexions uniting the spinal cord to the respiratory and digestive organs. With respect to the cystitis, it was attributable no doubt to the decomposition of the urine, and to the irritation caused by the sound in the bladder. What was remarkable in this case is, that the symptoms were continued, those painful tetanic contractions so characteristic in such affections, which come on at irregular periods, and are followed by more or less remission, not having been here at all observed.”

On a subject upon which much diversity of opinion prevails, namely, the cause of ramollissement of the nervous system, the following remarks are worthy of attention.

“*Observations on softening of the Cerebral Hemispheres.*—The excellent works published in later times, on softening of the brain, by MM Rostan, Lallemand, Bouillaud, and others, are far, in my opinion, from having exhausted this subject. Science as yet possesses only data oftentimes incomplete, either to establish with precision the nature of this affection, or even to assign it its real symptoms. I do not think, for instance, with M. Lallemand, that a sanguineous congestion always precedes softening of the brain: I think that there are some cases, where the first appreciable lesion consists even in the diminution of the consistence of the nervous pulp, and this diminution of consistence may continue the only alteration. Instead of being reddened by blood, the part softened may have preserved its natural colour, or even present a remarkable want of colour, without, in the latter case, anything warranting us in thinking, as M. Lallemand had admitted,

that pus infiltrated the nervous pulp so divested of colour. Softening of the brain does not necessarily commence by an hyperæmia; it is not necessarily complicated, during its course, even with sanguineous congestion; neither does it necessarily lead to suppuration; it exists as a lesion independent of any other lesion; it is not, uniformly, either the termination or commencement of any other, but many others may accidentally become complicated with it. In several cases, it is true, during its isolated existence, it is but one of the elements of inflammation of the brain; but because the irritation, produced by the entrance of a ball into the brain, causes around this foreign body the formation of a softening, with sanguineous congestion, infiltration of pus, &c. is that, in sound logic, a reason for concluding that every softening should be considered as an inflammatory disease?

All that we can discover, in a very great number of cases, is a diminution in the consistency of the nervous pulp, its change into a sort of *bouillie*, its slow or quick return to this half-liquid state, which was its primitive state. With respect to the causes of this alteration, they often escape us; with respect to its nature, even that is not known to us; and if, in this state of ignorance, we go beyond what facts teach us, if we assert that every softening is an inflammation, a degree or form of that which, in a language altogether arbitrary, we call an encephalitis, we do great injury to science; for it is quite clear, that, the moment we shall have placed such an opinion between our own understanding and facts, the latter will be no farther admitted by us, but so far as they shall come to confirm our hypothesis; there will thenceforth be a stop to all further progress. I think then with M. Rostan, that, until more is known on the subject, the term softening is preferable to any other to designate the alteration of the brain we are now about to consider.

"What shall I now say of the symptoms which have been assigned to softening of the brain? Read the several works published on this subject, and you will be astonished to see how much the symptomatology varies in them all. Such a morbid phenomenon, permanent flexion (contracture), for instance, which with one observer holds the first rank among the symptoms, is scarcely mentioned by another. It is the same with pain of head, disturbance of the intelligence, &c. The first phenomena which mark the existence of cerebral softening, are equally far from being described identically by different authors. For some persons it is always easy to distinguish, by the difference of their commencement, a hemorrhage of the brain, and a softening of this organ; for others such a distinction is often impossible.

"These differences of opinion are no doubt attributable to this, that each author has made his observations on subjects placed in conditions different in respect of age and constitution, whence there resulted, with regard to the

symptoms, so many special forms of the disease. Each person thus judging only from the point of view where he happened to be placed, has been able to discover only one side of the facts, and thus he remained incomplete in their description. I have endeavoured to avoid this rock by proceeding in a different course. After having detailed a certain number of cases, calculated to point out the leading differences which may be presented by softening of the brain, with regard to its symptoms, its commencements, its duration, and its nature, I have endeavoured to attain the most complete description possible of this affection, by combining with the facts collected by myself those previously published by different authors."

These few extracts must stamp the present work as superior to any in the English dress on this topic. It reflects great credit on Dr. Spillan's judgment in the selection of a much needed production; and we must confess the original has been benefited by the translation. But we shall refer again to the work.

REVIEW OF FOREIGN MEDICAL LITERATURE.

Archives Générales de Médecine.

THE Numbers of February and March contain the following articles:

1. Clinical Lectures on Surgery. Luxations of the Fore-arm and Leg, and on Fractures of the Knee. By M. Gerdy.

2. Memoir on the Connexion existing between the Nutritive Conduits of the Long Bones, and the Order in which the Epiphyses unite themselves with the Body of the Bone. By M. Berard, jun. This Memoir was read to the Academy of Sciences, Nov. 10, 1834.

3. Some Practical Facts—Therapeutic Observations on divers Neuralgia. By M. Mondière.

4. Memoir on the Employment of Cold Water as an Antiphlogistic in the treatment of Chirurgical Maladies. By Berard, jun. This article contains five observations which had not been published in the *Archives*, but which were comprised in the withdrawn Memoir.

5. Bulletin of the Anatomical Society, and Account given of their Works in 1834. By M. Chassaignac. Two other Memoirs: one on the Suppuration of the Lymphatic Vessels of the Uterus after Delivery, by M. Duplay; and the other on the Epidemic Influenza, particularly on that which appeared in Paris in 1833, by M. Richelot. Only yet commenced: when concluded we shall give an account of them.

Clinical Lectures on Surgery. By M. Gerdy; published by M. Beaugrand.—The very particular attention M. Gerdy seems to give to diseases of the bones presented at his clinic, the importance of the facts he stated, his valuable historic researches, and the sagacity

of his reflections, give great interest to his lectures.

Luxation of the Superior Front Extremity of the Radius.—Heliodorus is the only author of antiquity who seems to have known any thing about this luxation; and we must descend to the 18th century, and to Duverney, to find it re-entered in the Chirurgical Code, where, however, J. L. Petit himself will not admit it. In 1786, Rouyer presented to the Royal Academy of Surgeons a Memoir on Diastasis, in which he reports four cases of this species of displacement; since when, Léveillé, Delpech, and Richerand, have admitted its reality. Willaume has published a very detailed observation on it in the *Archives*; Duges three, in the *Weekly Journal*, 1831; but no one has considered the question so much at large as Sir Astley Cooper, who has given us eight observations on the subject, four of which are his own.

The following is a recent case related by M. Gerdy:

— Rolet, act. 8, was playing, Oct. 5, with other children in an empty cart. Intending to jump down from it he struck his foot against the wheel and fell forwards, the whole weight of his body resting on his right hand, which he extended to save his head. Immediate pain ensued through the whole extent of the fore-arm, and inability to move it. He was conveyed directly to the Hôpital Saint-Louis,

“On his arrival, the fore-arm was very slightly bent on the arm, and the hand half pronated. The direction of the radius seemed changed, inclined directly upwards towards the bend of the arm; the whole mass of the epicondyle muscles drawn within, augmenting the antero-posterior diameter of the fore-arm. By the touch, a bony eminence, smooth and even, was perceived in front of the cubito-humeral articulation, continuous with the radius; and at the summit of this eminence the finger perfectly recognised the central depression of the extremity of the radius. Besides these evident signs of luxation of the radius above and before, a manifest mobility and crepitation a little below the middle of the cubitus denoted a fracture of that bone.

“*Reduction.*—The patient being seated, an assistant took hold of the humerus a little above the elbow, another assistant of the hand, which he moderately supinated, and by means of moderate extensions, keeping at the same time the arm bent in the direction of the ulna. During this extension the Professor pushed the head of the radius with both his thumbs backwards and a little outwards, while his bent fingers rested on the posterior side of the articulation. The displaced bone soon retook its station, but without any sound. The ordinary apparatus for fracture of the fore-arm was applied with the precaution of putting on the superior front extremity of the radius a small compress several times doubled to prevent consecutive displacement, by augmenting the pressure behind and before.”

This luxation is frequent among children; out of sixteen patients on record attacked by this accident, eight are children. Almost always it is produced by a fall on the hand, and wherefore is it so? Léveillé, Delpech, Richerand, and Marjolin, attribute it to forced supinatory movements, an opinion very little accordant with facts. Sir Astley Cooper accounts for it by a sort of rebound of the head of the radius from roughly pressing on the superior extremity of the cubitus, an hypothesis inadmissible.

Is it not probable that, in falling on the hand, the effort operates so as to cause exaggerated extension of the fore-arm, or more likely to bend it backwards, and is it not thus, joining perhaps the instantaneous and violent contraction of the brachial biceps, that the radius slides from behind before?

On the derangements which accompany this luxation, we have nothing but conjectures. For its reduction, Léveillé and Richerand advise the pronation of the hand; a logical consequence of the erroneous theory which attributes the luxation to a forced movement of supination, and therefore without weight. Again, according to Willaume, though the reduction cannot be thus obtained, it may be easily effected by the supination of the hand. Duverney had already recommended this position; all, however, agree in recommending pressure with the thumb on the head of the displaced bone. Another useful precaution, to diminish the action of the biceps and round pronator, is slightly to bend the fore-arm on the arm, practising the extension on the radius only by inclining the hand towards the border of the ulna.

“*Lateral Luxation of the Radius.*—M. Gerdy has found among authors but one record of this luxation, and that is given by Sir Astley Cooper. It was produced by a violent stroke of the elbow against a tree, and was accompanied by fracture of the olecranon. A similar case accidentally presented itself during the consultation at St. Louis; but the patient unfortunately not returning, M. Gerdy could not recollect more of its details than the following.

“The accident happened in childhood, I believe, and from a fall. From that time the radius was considerably raised beyond the epicondyle, and not only could the finger feel and appreciate the forms of the capsule which terminates the radius, but even the skin habitually preserved the depression and moulding of the head of the displaced bone. The movements of flexion and extension were easily executed, nor was the patient at all incommoded by the unsightly conformation of the articulation of his elbow.”

We regret that M. Gerdy omitted to state whether the cubitus was or was not fractured; the luxation of the radius within seems scarcely possible without that occurrence. Three years ago we saw a case of luxation of the kind; the cubitus was fractured towards its superior

fourth. According to the patient's account of the matter, the luxation was unheeded, and the case considered and treated as simple fracture by a surgeon, who nevertheless enjoys some degree of repute. The callosity was excessively morbid.

Luxations of the Leg.—Several cases of luxation of this kind have been cited in a recent report made to the Royal Academy of Medicine, and, from the discussion which in consequence took place between MM. Larrey, Sanson, and Gimelle, it appears that the mode of procedure in such cases is not invariably fixed. M. Gerdy recalls an observation of Duvivier's, in which a luxation of the tibia before and behind, reduced with facility, was perfectly cured, except that there remained a slight impediment in the movements of flexion, and another, by Garnier, of partial luxation, successfully treated also, and altogether perfectly cured. A new case presented itself at St. Louis of which the following is the detail.

"A carpenter, *æt.* 36, of vigorous constitution and plethoric temperament, fell from a fourth story on a cellar stair, Dec. 1834, acute pain and strong tension in the articulation of the left knee immediately ensued, and, unable to rise, he was directly conveyed to St. Louis, where, besides fracture of the ribs, offering nothing remarkable, the following derangements were found.

"The left leg was half an inch shorter than the right, and slightly bent backwards. On feeling the articulation the internal tuberosity of the tibia was found salient at the anterior internal part, and to such a degree, that by depressing the skin the hand might be plunged into the articular cavity which receives the internal condyle of the thigh; the external tuberosity was hidden under the tendon of the rotula, and under the rotula itself; the internal condyle violently stretched the mass of the internal muscles of the ham with which it was covered, and the hand could not exactly appreciate the forms of it. The external condyle, less drawn backwards, strongly stretched the biceps and the corresponding head of the triceps. The anterior ridge of the tibia, the triangular face which surmounts it, and the rotulan tendon were so bent forwards, that the Professor at first mistook the eminence they formed for the rotula, but quickly discovered that this was immediately above, obliquely couched on the superior surface of the tibia, between that extremity and the thigh, where it was retained by the extensor muscles of the leg, themselves being bound by the femoral aponeurosis. Above and without the knee, a considerable œdematous swelling, the calf was equally altered in its form; the patient could not bend the leg, and the dull pain he felt in it was considerably increased by the slightest movement of it."

Here, then, was luxation of the tibia, forwards and inwards. The reduction was prompt, and not attended with violent pain: a crackling sound was perceptible when the knee

retook its natural form. Compression of the knee, and cold lotions on the bandage: he had a calm night. The following day could himself raise the leg, and without the slightest pain.

"December 19.—The patient tried to walk, but the leg was yet too weak to support him. On the 25th he could rise and walk with great ease, a slight weakness in the knee alone remaining.

"The cause of the displacement in this case cannot be appreciated, as the patient was completely ignorant of the circumstances of his fall. M. Gerdy successively examined the symptoms. The shortening of the limb was naturally explained by the position of the deranged parts; this appeared to us controvertible. It seemed impossible with two dry bones to place the tibia in such a manner as to cause in the living limb a shortening of half-an-inch; for this there must be complete luxation. The leg was motionless on the thigh, which tended, as M. Gerdy properly indicated, to the conservation of some portions of the ligaments. It is, nevertheless, conceivable, that complete luxation, which can scarcely happen without complete rupture, permits some movements on each other to the two bones, as noted in many observations. As to the treatment adopted, M. Gerdy thought that the reduction was perfectly indicated, and, from others similar, he observes, he has seen the most beneficial results."

The two last paragraphs of this article refer to fracture of the rotula, and to fracture of the condyles of the thigh. M. Gerdy cites, on an observation on each of these fractures, which he has treated with success, the rotula seemed even re-united by a bony callosity, for on comparing it to that on the sound side, there was not half a line difference in length. But the want of exact re-union gives rise to no great inconvenience; and the Professor cited a fact from his Physiology, of a man who, despite of a consolidated fracture, with a slight division between the bony portions, could still walk seven leagues a-day.

Foreign Medicine.

ACADEMIE DE MEDECINE.

Sitting of April 7.

New Method of curing Abdominal Hernia.

BY M. GERDY.

The operation is thus performed:—1st. With the point of the finger, push the skin within the opening and the hernial canal, exactly as the finger of a glove may be turned from the outside to the inside to its full extent. 2nd. By three, four, or five sutures, fix the bottom of the inward-pressed saciform skin to the anterior wall of the hernial canal. 3rd. Inflammation with ammonia the cavity of the sac, to

cause adherence of its walls and efface the cavity. 4th. Still further to assure the success of the operation, the exterior opening of the inward-pressed sac may be more closely shut by a few similar sutures.

The operation is attended with very little pain, is perfectly harmless, performed without any incision, and shuts most completely and solidly the hernial orifice and canal. In my first operation, March 12th, the adhesences were perfected in about eight days, and the cure is now complete; of my second, on the 27th, I shall give an account at the next sitting.

"If the hopes I have formed of this operation be realised," adds M. Gerdy, "immense service will be rendered to my fellow-creatures by freeing them from a very common, very inconvenient, and dangerous malady; immense saving will also be made of public expenditure, now devoted to hernial bandages necessary for the poor, and for our armies by sea and land."

Extraordinary Case of Pregnancy—Delivered by the Rectum.

BY PROFESSOR PETRUNTI, OF NAPLES.

A lady of Salerno, æt. 36, the mother of five children, the eldest of whom was six years old, felt again all the symptoms of pregnancy, and such in every respect as she had always felt before.

After the two first months unusual symptoms appeared,—vomiting, violent epigastric pains, turgescence of the abdomen, lumbar pains, &c., and these symptoms increased in the third month, with habitual nocturnal fever and cachectic emaciation; the sub-pubean region began to rise progressively, especially on the right side. In the fourth month, development of the breasts and secretion of milk; movements in the tumour analogous to those of a fœtus, and perceptible to the hand and the ear.

Her pregnancy, of which several medical men had no doubt, was denied by the attendant practitioner, who persisted in considering it a simple retention in the uterine cavity of the menstrual blood, intercepted in its course for more than five months, and not a true pregnancy, and he consequently administered black rye, with intent to provoke the uterine contractions and expel the clots. Uterine pains and a sanguinolent flow from the vagina ensued, followed by the expulsion of a kind of small organised bag, supposed to be an abortion. The hypogastric tumour sunk, and the movements of the fœtus ceased. It was now the sixth month of her pregnancy. From this time the constipation increased, and no treatment could remove it. The tenesmus existing was excruciatingly painful, and accompanied by fever. The desire of going to the *garderobe* being one day imperious, and the effecting her purpose impossible, threw the patient into such a fit of rage and despair, that, in her paroxysm, she introduced her finger into the rectum, and in utter astonishment felt a hard

and sharp foreign body, which she vainly tried to extract. On the following day she tried again, and succeeded in extracting from the rectum a hard and sharp-pointed body, which the medical attendant recognised as a portion of the maxillary bone of a fœtus some months old. The Professor Petrunti was now called in, and found the patient in the last period of marasmus with fever.

That skilful surgeon having explored the rectum, and found a small opening, leading as it were to the situation of the uterus, plunged the almost dying patient for one hour into a bath; then, all things being disposed for the operation, he proceeded as follows:—

The patient being placed as if for the operation of cystotomy, he introduced the fore finger of the left hand into the rectum and enlarged the opening of the amniotic sac; having touched the osseous fragments, a pair of small polypus forceps were carried with the finger into the pouch, and by which means the vertebral column became extracted; in the same manner he then extracted several pieces of the bones of skull. The extreme weakness of the patient not permitting the operation to continue, it was remitted to the following and succeeding days, and within the course of four, the bones of the entire skeleton were thus extracted.

At every interval between the respective operations, emollient baths and injections to the interior of the cyst by means of a gum-elastic probe were administered. By degrees the general symptoms disappeared, the patient's strength returned, the diarrhœtic flow which had supervened ceased, the intra-rectal cavity by degrees became united, then closed completely by the use of astringent injections, and three weeks afterwards the patient was perfectly restored to health. The skeleton of this fœtus is now in the magnificent anatomical cabinet of Professor Nanula, at Naples.

Notice on Inflammations of the Breast.

From several cases of inflammation of the breast in the wards of the hospital, M. Velpeau has given an interesting notice.

According to the professor, the subject of inflammation of the breast has hitherto been studied in too general and vague a manner; due attention has not been given to the anatomy of that region, one of those regions of the human frame which especially illustrates the importance and necessity of surgical anatomy. And, first, he recognises as many different inflammations and diversities of abscesses as there are tissues in different parts of the female breast, and then proceeds to indicate the structure of those tissues.

The mammary gland is covered with a membranous couche, which varies in texture, thickness, and sensibility; near the nipple it adheres intimately to the skin, is cellular, and thickens in the same ratio as it recedes from the nipple. The deep surface of the gland is, as it were, lined by a true fibrinous membrane. This gland is formed of excretory

vessels, and of lobules separated by partitions of a fibro-cellulose texture. Inflammation of it may arise from two kinds of causes,—external causes or external violence, internal causes or alterations of the liquids in the lacteal vessels. From the first cause arise the maladies of the breast in women not yet delivered; to women gestating or delivered they arise from the second cause. The weight of the breast also, when voluminous and flaccid, may determine inflammation from the immense dragging on the roots of the mammae, especially on the external side, the skin of which being extremely thin, and receiving the axillary nerves and vessels.

M. Velpeau then proceeds to examine in a more general manner the maladies peculiar to each tissue.

1st. The superficial cellular tissue inflamed near the nipple from external violence, is seldom dangerously affected, because it is loose, lamellous, and filamentous; an abscess formed here is small, ferunculous, and tuberculous, opens most frequently on the exterior, and has all the characters of sub-cutaneous abscess.

2nd. When, on the contrary, there is inflammation in the tissue which separates the gland from the chest, the pain and swelling are excessive; there is no apparent fluctuation, and it is only possible to recognise it by gently embracing the whole breast within the hand, and by doubling it, as it were, softly on itself, for then, if it exist, the breast seems to rest, as it were, on a spongy body, or more clearly, the phenomenon which manifests itself resembles most perfectly that which is felt on pressure of the patella raised by a liquid which distends the articulation of the knee. In this tissue also an abscess opens exteriorly.

3rd. When inflammation is seated in the cellulose-fibrous bands, the inter-cellular lamellae, which unite the granulations of the gland, it manifests itself slowly and incompletely on several different points. In this case the abscess tends to issue either towards the skin, or towards the chest, according to the depth of its situation. Such are the different and well-marked symptoms in three different tissues affected by exterior causes.

It now remains to inquire what may be the interior causes which produce inflammation of the breast. It cannot take place until the woman is delivered; if she nurse the infant, inflammation may arise, but less frequently than if she did not; in both cases the inflammation begins in the lacteals. This malady is known by the name of lacteitis, or engorgement of women in child-bed, and arises from the coagulation of the milk, which becoming thus a foreign body irritates the surrounding cellular tissue, and of course produces inflammation. The alteration of the milk may also prove a cause of irritation, and if persisting, the irritation extends to the exterior.

The treatment of course varies according to the cause and the tissue affected. Thus, in affection of the sub-cutaneous tissue, energetic antiphlogistics, preceded by copious blood-letting the first day; leeches succeeded by cataplasms on the following day. On the slightest intimation of suppuration the abscess must be immediately opened, otherwise the stagnation of the pus readily propagates itself in the surrounding cellular tissue from the continuity of the cellulose. If the purulent collection be seated between the gland and the chest, that is to say, deeply, general accidents speedily supervene, such as shivering, fever, heat in the skin, redness of the margin of the tongue, &c., pain and swelling also of the breast. Blood-letting is the first necessary step, but the fever must abate before leeches are applied in great numbers.

If the least fluctuation be manifest, it is necessary to plunge the instrument at the circumference of the breast at its most inferior part, and as soon as the point of the instrument has reached the abscess, a great quantity of liquid will issue; from such abscesses M. Velpeau has drawn even to the amount of two pints. And if this operation be neglected, serious accidents will frequently arise, for example, either in the belly or the chest; or if they burst themselves, they may re-form in a less favourable part of the breast; such are those that appear near the nipple, and which ever become fistulous ulcers.

In inflammation of the glandular tissue, which manifests itself especially by red tumours, as before observed, the suppuration establishing itself slowly, recourse must be had to an appropriate antiphlogistic treatment, and leeches; and when they no longer act, have recourse to the instrument as soon as possible.

If this be impossible, revulsion must be caused on some part of the economy, preferably on the digestive tube, by purgatives and laxatives; as the fluids which then flow abundantly to the breast are turned back, and the lacteal engorgement is then dried up; and first by one or several general bleedings, and one or two purgatives or laxatives, according to the intensity of the inflammation. If it still resist, leeches must be applied on the exterior side and above the breast, a few at a time, and every fourth or fifth day. But this treatment is suitable only when the affection is acute; if, on the contrary, it be demi-acute, compression may be tried, which may be very easily accomplished.

FRICITION.

FRICITION of the extremities and abdomen with a flesh-brush, flannel, or a coarse linen cloth, is very useful in hypochondriacal and dyspeptic complaints, and was much recommended by Boerhaave.

DR. WOODFORD.

QUACKERY IN THE PROFESSION.

HOW TO GET AN APPRENTICE.

A DRAMATIC SKETCH.

To the Editors of the London Medical and Surgical Journal.

"Dulce est desipere in loco."

GENTLEMEN—You have zealously and conscientiously laboured for the suppression of quackery; you have faithfully guarded, even to persecution, the honour of the profession; and I cannot doubt your readiness to give insertion to the following plain statement. The conscience and intelligence of every honest and educated member of our profession will furnish the comments.

To the Editors of the London Medical and Surgical Journal.

In the *Cambrian* newspaper of this day, (and for many weeks past,) appears an advertisement, setting forth the inestimable virtues of "CHEDDON'S famed Herbal Tonic Pills, for the cure of Scrofula, Scurvy, &c. &c. and all Disorders attended with painful swellings, and all Eruptions of the Skin, Gout, Rheumatism, Flatulency, Nervousness, &c. &c." a list too long for your columns. To this advertisement are appended letters testimonial and recommendatory, from Dr. BELL, of Manchester; Dr. BROWNE, of Glasgow; SURGEON BROWNE, of Leeds; Dr. DARWALL, of Birmingham; Dr. THOMPSON, of Leeds; and Dr. PALMER, of Watworth.

GENTLEMEN,—As a specimen of the mode in which medical apprentices are often manufactured in our country-side, I inclose the description of a scene of which I was an ear-witness. The dialogue is given word for word, as I happen to have a strong memory, and the soliloquies of the Doctor at the commencement and conclusion were uttered by him, as he is in the habit of speaking to himself, *à l'â voix*. The young gentleman is now duly indentured, and passes his time in cleaning his master's shoes, windows, pony, &c., and, I have no doubt, will, in a few years, be seen haunting the beadle's office at Apothecaries' Hall in search of a "situation." Will any one wonder after this at the low estimation in which the profession holds its assistants?

I am, Gentlemen, &c.

DRAMATICUS.

From my Parlour,
Near Witney, Oxon.

SCENE—A Village in Oxfordshire.

There also appears, in the same paper, an advertisement of "ROWLAND'S Genuine Kalydor, extracted from the most BEAUTIFUL EXOTICS;" and, to aid the sale of this article, is inserted a testimonial, dated, "Theatre of Zoology, Gower Place, London University," and signed, "H. W. DEWHURST, Professor of Anatomy."

MR. CRANIUM is discovered pacing to and fro in his back parlour, every now and then looking out of a window which faces the road. Strikes his forehead.

Another advertisement of an equally precious article, "DR. WRIGHT'S Celebrated Pearl Ointment," for the cure of as many diseases as any of the other true and genuine infallibles, has for a long time contained (though only alluded to in this paper) a "WONDERFUL TESTIMONIAL," signed by "CHARLES ASTON KEY, Senior Surgeon of Guy's Hospital." Add to these the puff on a circular sent round by a brandy merchant well known in London, to the following effect—"Dr. Ryan refers his cholera patients particularly to Mr. Brett, as he considers the British brandy sold by him much more pure than the Foreign for both medicinal and domestic purposes," and we have a pretty specimen of the times.

CRANIUM. Well, I am sure! not a patient this morning! Nothing strange, nevertheless, but rather provoking. Here have I been these fifteen blessed months, and have earned but as many half-crowns; unless things mend, by Jupiter, instead of pounding in my mortar I shall be obliged to pound in the road. A stone-breaker, after all, is not so much *mal-a-propos* to my profession. Lithotripsy, they say, makes rapid strides in the metropolis, but—(looks out again). Ah! there comes my neighbour Shinbones, the butcher. He seems feverish, too, if one may trust the look of his outward man. Let me see—how much do I owe him? What can he want? (A knocking is heard without—Servant-maid enters.)

If these published testimonials and signatures are false, for the sake of their reputation as members of a scientific and honourable profession, and for the honour of that profession itself, they ought to be as publicly disavowed by the parties whose names are thus violated by the mammon lust of Empiricism; if genuine—

MAID. Sir, Sir, here is Measter Jobas Shinbones has a mind to see you; he is in a mountain of a hurry. A' says—

I am, gentlemen,
Your constant reader,
MAY 2, 1835. A COUNTRY SURGEON.

CRANIUM. Poh! poh! never mind what he says. Show him in; show him in. Now for a teaser! Oh! (Enter Shinbones.) A very good morning to you, Mr. Shinbones.

SHINBONES. Zaryant, zur!! (Shinbones makes a leg.)

CRANIUM. Pray be seated—do now. How wild you look. What's the matter?

SHINBONES. Eh?

CRANIUM. I beg pardon. How well you look! What can be the matter with you?

SHINBONES. Anan!

CRANIUM. Ah! I see how it is—A porker stolen, astray—gave chase—out of breath entirely. Do, now, Mr. Shinbones, take your time—be seated (*hands a chair*). (*Aside.*) No bailliffs after him, I hope (*Shinbones seats himself*). Why, Mr. Shinbones, you are out of breath!

SHINBONES. Noa, zur, I'se not out o' wind vrom running, but zomat elz.—Moy zon, d'ye zee, zur, haven took't into his head to go a doctoring, and a' zays you must be his measter. Oh! (*groans grievously*).

CRANIUM. Go a doctoring!—I his measter! (*Aside.*) 'Twill do, 'twill do.—I spy a loop-hole in my wall of poverty. (*To Shinbones.*) Just as it ought to be.—Do, Mr. Shinbones, calm your trepidation, that is, be quiet, and tell me what your wife zays to your son's choice. He's a fine lad—a capital fellow to make a surgeon of, eh?

SHINBONES. You doant zay zo, zur (*with surprise*). A' would joast az well thought of making my dickass a doctor (*sneezes*).

CRANIUM. You are really too modest, Mr. Shinbones—a great deal too modest. Why, he's the finest lad in the village, and—

SHINBONES. Ay, ay, zur, a's gotten a big head, and legs long enough—but his heddication—his heddication—a' wants to know zomat about that. Why a's gotten it all out o' waste paper.

CRANIUM. (*Aside.*) Heddication and waste paper! (*To Shinbones.*) Not at all new, sir; many a man has obtained his learning in a less reputable way.—But did you say *waste paper*?

SHINBONES. Yeaz, yeaz,—od's fish!—A's made what a' calls a loibry out o' the waste paper I puts my chops and such like caphiperies in (*yawns*).

CRANIUM. A notable expedient. But pray, Mr. Shinbones, does your son know mathematics? (*Shinbones stares and winks.*)

SHINBONES. A' doant know as he know Matthew Matticks, but a' knows his brother Tom Matticks more nor I loiks on't.—There, now! (*Nods significantly.*)

CRANIUM. Ah! a sad fellow, that Tom Matticks; but I perceive that your son's head has been at work.—A clever fellow, no doubt, and just fit for a doctor.

SHINBONES. At work!—I believe you!—A's head's loik a brewer's vat, always a working (*starts, and jumps up*); but, Doctor (*seizes Cranium's hands*), d'ye think ye could make onything of him?

CRANIUM. I have no doubt of it—send him to me.—*Mind*, seven years of it, and—

SHINBONES. God bless you, zur!—I'll go and zend un now (*going*), I wull.

CRANIUM. No, no, not yet.—Stop!—the premium!—We have not settled about that—what will you give me?

SHINBONES. Wauds! I didn't kolkilate about that smotherer.—Whoy, suppose we cry quits and the boy works hard for you, won't that do?

CRANIUM. Quits!

SHINBONES. Ay, quits—d'ye think you owe me nought? (*Pulls out of his pocket a greasy piece of paper.*) Here's my day book, as they calls un (*looks hard at his day-book*). Whoy you owes I a matter of more nor vive puns—aint that enough?

CRANIUM. Enough! My dear fellow, put twenty to it, and I am your man and your son's inaster.

SHINBONES. Oh! murder! Whoy there's Jem Shavecheese, the barber, would take him for nought, and thank me in the bargain.—The lad's a bright lad, Mr. Cranium.

Mr. CRANIUM. Aye, true; but I shall have to polish him up (*looks knowingly*).

SHINBONES. Not more nor he'll polish your bottles and boots; besides, a's a special hand at physialready! there now! (*Slaps the table.*)

CRANIUM (*aside*). Chops, physic, and waste paper! (*To Shinbones.*) What d'ye say? your son a special hand at physic? Impossible!

SHINBONES. I zay zo, zur. A's physicked two of my ould cows only the night afore last 'till they kick'd again.—Wauns! and last night as ever was a' thought a' would have killed the pigs: a' giv'd them hogslard and broomstin to make their teeth grow. A's a special lad! there now! (*Stares.*)

CRANIUM. No doubt of it—no doubt. (*Aside.*) A precious dentist. (*To Shinbones.*) But I must have twenty pounds and your receipt for my account—nothing less.

SHINBONES. Well, zur, if it must be so it must be so; for as there beant' another doctor in the village, an' the mother loves the lad's company, I suppose I must let you take the money from me. Though—if it warn't for his mother I'd rather he'd be a butcher. But (*blows his nose*) I doant care so much nouter, for he'll be a butcher-loike after all, as my wife zays. He, he, he! What say you, Doctor, eh?

CRANIUM. Ha, ha, ha! a capital jokè. I'll take care of that. We both use the knife, you know, Mr. Shinbones.

SHINBONES. Aye, zur; true, zur; (*aside*) and a vork too, for I'm a borker if he an't vork'd some hundred weight of my meat down his wizen; and yet, for all that, a's no vatter nor he was when he vurst com'd down to our village: there now!

CRANIUM. Well, Mr. Jobas Shinbones, is it quits and twenty pounds, eh?

SHINBONES. My wife (*grinds his teeth*) will have it soa, blow me; but howsomehow, let it be so, it's no use kicking, let it be soa: Measter Lawplug will draw the tool, and I'll zign it—devil fetch me, I'll zign it. Good bye, good bye (*takes up his head thatch*). My zun shall be a doctor bright, and no mistake. Good bye. [*Exit.*]

CRANIUM (*solus, looking out of the window*). There he goes, or rather waddles; and when I look at his huge jowls and greasy hide, I cannot help thinking what a bright star the son of such a hill of fat will become in the medical world. (*Quits the window.*) And

yet, I envy the fellow too, and half wish myself a butcher. I should then, at least, have my dry bones a little better covered than they are, and they would not startle the children with their rattling as I pass through the village. But, "*pergat ut antea*" (seizes a mortar), "*persistat*" (pounds) "*in usu*," of starvation and disappointment. (Runs to the window and looks out.) A heavy look out—a ponderous prospect! Shinbones and a shower of hail, and I don't know which pelts fastest—go it, Shinbones! (Returns to the mortar.) Whiz: these aloes rise like Lundy Foot's snuff! (Sneezes.) *O, sors durior saxis!* (Pounds vehemently.)
(Here drop the curtain.)

THE

London Medical and Surgical Journal.
Saturday, May 16, 1835.

THE LATE REGULATIONS AT APOTHECARIES' HALL.

As we foresaw, the last manifesto sent forth from the Hall of Apothecaries has given rise to considerable hubbub and animadversion in the ranks of both lecturers and students. The former think themselves passed over too slightly by the Blackfriars authorities, and maintain that the individual, as well as collective, opinions of the different lecturers in London should have been consulted previous to the promulgation of the last curriculum; while the students exclaim aloud against what they term a fresh crusade upon their time and purses. We have before us an immense number of letters from the non-contents of both grades; and the din of Gamaliels and disciples is alike hostile to the new order of things. They affirm that there is "*something rotten in the state of Denmark*," something tottering in the Hall at Blackfriars, or its wisdom would not, at the present critical moment, have sounded the note of partial reformation, when it is well understood that, before many months elapse, the Government will "blow a blast so loud and shrill," that the puny trumpet of the

Apothecaries' Company shall sink into insignificance, or be heard no more; in other words, a measure of thorough reform in all our medical institutions will be introduced. Scarcely one of our correspondents on the subject gives a word of defence for, or a breath of encouragement to, the "grave and worthy seniors" in question. These "very trusty and approved good masters" are one and all set down as dealing for the exclusive benefit of their own establishment, and preparing, in anticipation of standing high in the public opinion as reformers of medical discipline, regulations which, although in themselves good, are at the present juncture vexatious and tyrannical to their subjects, the aspirants to the rank of general practitioners. And this it is broadly hinted they do, first, that when inevitable purification of the laws which govern our tripartite body is accorded by the hands of government, the scythe of demolition may spare their house on account of its zeal in furtherance of medical education. And, secondly, that they may gratify an innate propensity they have for innovation, and puzzling the wits of their already sufficiently hampered dependants.

All this have we read, but not a letter will we publish, since to do that courtesy to all the parties would take up the space of about half-a-dozen of our journals; we propose, therefore, doing equal justice to each correspondent, and have condensed in the foregoing the pith and meaning of several sheets of foolscap. Time and expense, we observe, are liberally commented upon, but scarcely a syllable drops about the improvement to which their increase is calculated to lead. "Pay me," says the lecturer, "and let me go; let my duties be accomplished in the shortest possible time." "Let me go

quickly too," rejoins the pupil, "but let me pay as little as possible," and both the teacher and the taught are acting under a very natural impulse, that of getting a great deal for nothing, many advantages at a trifling sacrifice; and, were scientific acquirements capable of being communicated or obtained on such easy terms, their consummation might be devoutly prayed for.

But improvement must begin somewhere, and, having begun, it is desirable that it should continue its progress. Now wherever it commences, there it is sure to encounter the opposition of that *pondus iners*, the advocates of things as they are.

These incubi on the breast of science have a yell always ready wherewith to greet her advance, and thorns wherewith to strew her path. And it appears to us that the Court at Apothecaries' Hall have in this instance been destined to experience the loudness of the one and the sharpness of the other. And this they have earned for themselves, by an ill-timed attempt to screw their obnoxious code to its utmost limit. It is but justice, however, to say that the disapprobation they have excited is not confined merely to such as are, in general, opponents of all improvements that tax either the brain or the pocket, but is extended to other quarters where a warm predilection for their doings has hitherto been felt and avowed. Indeed their forgetfulness of the maxim

"Nullum numen abest, si sit *prudencia*,"

is acknowledged, where such acknowledgment must give due weight.

It is a fine thing, no doubt, to prepare doses of education for others, but it is of no less importance to administer the doses at proper periods, so that no unpleasant reaction may arise. The question is whether the present prescription of the Court of

Apothecary Examiners has been so administered. The verdict of the majority pronounced in the negative, and condemns the Worshipful Company for having taken so important a step in advance, when they ought to have remained in *statu quo*. Condemns their barge of Examiners for tugging against the stream, when, by resting a brief period on their oars, a current would arrive along which they might glide to their destined haven, wherever that might be, without any puffing and blowing. For it may be taken as granted that, when our long wished for reform takes place, the future duties of the Society at Blackfriars will be confined to a somewhat inferior sphere of action to that in which they luxuriate now.

Leaving considerations of this kind, however, out of the question, and setting the influence of the Society aside, it is evident that the improvement of medical education is an affair of the utmost consequence; and, whether looked at abstractedly or in conjunction with the patronage and directions of the Colleges and Hall, a matter of great moment to the welfare of society. And if the tendency of the recent regulations issued by the Hall lead to the advancement of professional attainments, we do not see why any crooked motives on their side of self-aggrandisement should be too anxiously sought after. It is evident that the medical practitioner cannot preserve his rank in society without adopting the spirit of the age, and seeking improvement wherever his equals are in the habit of searching for it. The public have liberal sources whence to obtain information, and the medical man must mingle with all classes, and therefore should accomplish himself for all. The Apothecaries' Company have done something in furtherance of this object. They have strenuously recom-

mended that the period of apprenticeship should be preceded by a solid preliminary education; and that this period itself should be engaged in studies more consonant to the character of the profession than has been the case hitherto. It is true the Society go no farther than to *recommend* when they might have *insisted*; but still the *animus*, the feeling for amendment, ought to be duly appreciated. Formerly it was common to hear persons, whose years should have taught them better, exhibit such a lack of intellect as to advocate the propriety of spoiling five years, which should be dedicated to a general cultivation of all the branches of the profession, in the mere mechanical drudgery of the pestle and mortar. We trust that such follies have gone by, and that medical education will no more be considered as a mere commercial pursuit. Physicians, surgeons, and apothecaries must soon blend into one. The nominal distinctions at present existing are nugatory in practice. The value of human life in all ranks is equal, and the qualifications of such as are entrusted with its guardianship should also be equal.

A few of our correspondents have launched forth in praise of the foreign schools as compared with our own. Now we happen to be of a different opinion, and assert that in point of respectability and weight, as well as of solid attainments, the English schools surpass the Continental; and, farther, that the English practitioner ranks, both in attainments and station in society, above his Continental brethren.

He is not bedizened, certainly, with the tinsel and frippery which goes current among our Gallic neighbours for knowledge, nor is he inclined to drink deep of the metaphysical potations quaffed by the Germans; but it is a well-known fact,

that the most considerable advancements were made in the medical sciences during the late war, and at a period when the Continent was barricaded against us—when nothing in the shape of professional information could travel to us thence. Those persons who have vagabondised since the peace to collect information, have not, we believe, in any instance, signalised themselves upon their return. Travel may have sharpened their wits, but it has been generally in the wrong direction. In fine, we recommend our correspondents not to be too nice about the quarter whence improvements in our professional codes of education may arise. Let them come from whence they will, they may be useful and do good service to the state. Let petty cavilling be laid aside. Let it be remembered that such men as Sir William Temple, Dr. Johnson, Judge Blackstone, the celebrated Dr. Samuel Parr, and many other writers of the highest authority, have spoken highly of the feeling and attainments of British medical men, and that it ill becomes us, as a body, to whoop down what may be really serviceable, merely because it has originated in a quarter which carries not with it our best sympathies.

FEES OF PROFESSORS OF ANATOMY.

It is beginning to be whispered in the Schools of some of our first-rate Hospitals, that the fees demanded by the Professors for attendance on the anatomical courses of lectures are somewhat too high. The Demonstrator's fee is also considered rather beyond the mark. The students argue thus:—They say that, during the time when subjects stood at a very enormous price, they paid their fees willingly; but now that the *commodity* is furnished upon very moderate terms they expect

that some reduction should be effected, more especially as the duration of the term of study is about to be extended. They point out the liberal conduct of the Physicians, in allowing an additional six months' attendance on their practice, without an increase of charge, as an example to the Lecturers; and, in short, have made calculations which are rather startling with respect to the remuneration, hitherto pocketed by Professors of Anatomy in large schools. A scale of the profits derived in one of these is now before our eyes, and certainly, after every allowance is made for the expences (*quoad* tuition) of the professor, it leaves a goodly row of figures as the balance in his favour—verily one which Mammon himself might covet.

It is not our disposition, however, to cavil at the extent of reward for their labours, which men of science and ability ought always to enjoy. So long as it runs not to excess—so long as there is something like fairness about it—we should feel disinclined to analyse very accurately the sum total of their gain. But the time is now arrived when science should be freed from some of the trammels which have restrained its efforts. Heavy fees levied on the student are of this description;—they are, virtually, shackles; and we would just hint, as there are new schools of medicine forming in several quarters, the necessity of a revision in their fee scale. Subjects for the purpose of anatomy are to be obtained at a much more moderate price than formerly; the number of anatomical professors is increasing; and we cannot see why, when the market becomes stocked in this way, the prices should not fall. We do not mean, nevertheless, to advocate a *too* cheap, but only a reasonable, system of professors' fees; and we think, that in

conceding a little in this point they would not, ultimately, be losers.

THE MARCH OF EMPIRICISM.

THE annals of quackery have, in this country, ever contained instances of the most brazen-faced impudence united to every species of cunning. The letter of a Correspondent, signing himself "A Country Surgeon," which will be found in the pages of this Number, directs our attention to the rascally puffs of some of these unprincipled vagabonds. Not content with imposing the grossest falsehoods on the public, in their daily advertisements and handbills, they have adopted the plan of appending the names of gentlemen standing high in our profession to their nauseous farrago, as witnesses, forsooth, of the lies therein indited!

If the parties thus outraged (for we cannot believe that any man of reputation would lend his name to such mischievous humbug),—if the parties thus outraged; believe that there is no necessity to refute the scandalous pretensions of the knaves who thus misuse them, they are mistaken. The public will quickly cease to respect an individual, however great his professional fame may be, if they find his name tacked, with impunity, to dirty handbills, as the attester of their swindling protestations. Gentlemen thus defrauded of their fame by the machinations of these avaricious scoundrels, should promptly deny their participation in the roguery, and thus set themselves right in the eyes of the world; if they do not, they must be content with the dubious respect they will soon find paid them. There are some things,—and quackery is one of them,—which infect by the slightest touch.

SOCIETY OF APOTHECARIES.

Regulations to be observed by Students intending to qualify themselves to practise as Apothecaries in England and Wales.

EVERY candidate for a certificate to practise as an apothecary, will be required to produce testimonials—

Of having served an apprenticeship of not less than five years to an apothecary; or having attained the full age of twenty-one years; and of good moral conduct.

Students whose attendance on lectures shall commence on or after the 1st of October, 1835, will also be required to produce proof of having attended, during three Winter and two Summer sessions, lectures in the following order, and medical practice from the commencement of the second to the termination of the third Winter session.

The Winter medical session is to be understood as commencing on the 1st of October, and terminating in the middle of April, with a recess of fourteen days at Christmas: the Summer session as commencing on the 1st of May, and ending on the 31st of July.

First Winter Session.—Chemistry; anatomy and physiology; anatomical demonstrations; materia medica and therapeutics.

First Summer Session.—Botany; and such other branches of study as may improve the student's general education.

Second Winter Session.—Anatomy and physiology; anatomical demonstrations; dissections; principles and practice of medicine; medical practice of an hospital.

Second Summer Session.—Botany, if not attended during the first Summer session; midwifery and diseases of women and children; forensic medicine; medical practice of an hospital.

Third Winter Session.—Dissections; principles and practice of medicine; midwifery, with attendance on cases; medical practice of an hospital or dispensary.

The student is required to attend the medical practice of a recognised hospital, from the commencement of the second Winter to the termination of the second Summer session, and from that time to the end of the third Winter session, at an hospital, or recognised dispensary.

The sessional course of instruction in each respective subject of study, is to consist of not less than the following number of lectures, viz.:

One hundred on chemistry; one hundred on materia medica and therapeutics; one hundred on the principles and practice of medicine; sixty on midwifery, and the diseases of women and children; fifty on forensic medicine; fifty on botany.

The number of lectures on anatomy and physiology, and of anatomical demonstrations, must be in conformity with the regulations of the Royal College of Surgeons of London, on these subjects.

The lectures required in each course respectively, must be given on separate days.

Students, when they present themselves for examination, must bring testimonials of having received instruction in practical chemistry during their attendance upon the lectures on chemistry, materia medica, or forensic medicine; and also of having attended a full course of clinical lectures, and such instruction in morbid anatomy as may be afforded them during their attendance at an hospital.

Every student will be required to produce proof of having dissected the whole of the body once at least.

Students whose attendance on lectures commenced prior to the 1st of February, 1828, will be admitted to examination in conformity with the regulations published in Sept., 1826—viz. after an attendance on

One course of lectures on chemistry; one course of lectures on materia medica; two courses of lectures on anatomy and physiology; two courses of lectures on the theory and practice of medicine; and six months' physician's practice at an hospital, or nine months' at a dispensary.

Those who began to attend lectures subsequently to the 1st of February, 1828, and previously to the 1st of October of the same year, in conformity with the regulations of September, 1827—viz. after an attendance on

One course of lectures on chemistry; one course of lectures on materia medica and botany; two courses of lectures on anatomy and physiology; two courses of lectures on the theory and practice of medicine: these last having been attended subsequently to the lectures on chemistry and materia medica, and to one course at least of anatomy; and six months', at least, physician's practice at an hospital, or nine months' at a dispensary; such attendance having commenced subsequently to the termination of the first course of lectures on the principles and practice of medicine.

Those whose attendance on lectures commenced in October, 1828, must have complied with the regulations of September, 1828—viz. by having attended

Two courses of lectures on chemistry; two courses of lectures on materia medica and botany; two courses of lectures on anatomy and physiology; two courses of anatomical demonstrations; two courses of lectures on the theory and practice of medicine: these last having been attended subsequently to one course of lectures on chemistry, materia medica, and anatomy; and six months', at least, the physician's practice at an hospital (containing not less than sixty beds), or nine months at a dispensary; such attendance to have commenced subsequently to the termination of the first course of lectures on the principles and practice of medicine.

All students who began to attend lectures in January, 1829, are required to have attended the physician's practice at an hospital for nine months, or at a dispensary for twelve months, and also to have attended

Two courses of lectures on midwifery, and the diseases of women and children.

Students whose attendance on lectures commenced on or after January, 1831, must adduce proof of having devoted at least two years to an attendance on lectures and hospital practice, and of having attended the following courses of lectures:—

Chemistry: two courses—each course consisting of not less than forty-five lectures. *Materia medica* and therapeutics: two courses—each course consisting of not less than forty-five lectures. Anatomy and physiology: two courses. Anatomical demonstrations: two courses. Of the same extent as required by the Royal College of Surgeons of London.

Principles and Practice of Medicine: Two courses—each course consisting of not less than forty-five lectures. To be attended subsequently to the termination of the first course of lectures on chemistry, *materia medica*, and anatomy and physiology.—Botany: one course, consisting of not less than thirty lectures. To be attended between the 1st of April and 31st of October.—Midwifery, and the diseases of women and children: two courses.—Forensic medicine: one course. To be attended during the second year.

Students are likewise earnestly recommended to avail themselves of instruction in morbid anatomy.

The candidate must also have attended, for twelve months at least, the physician's practice at an hospital containing not less than sixty beds, and where a course of clinical lectures is given; or for fifteen months at an hospital wherein clinical lectures are not given; or for fifteen months at a dispensary connected with some medical school recognised by the Court. No part of this attendance can be entered upon until the termination of one entire year from the commencement of attendance on lectures, nor until one course of lectures, at least, on chemistry, *materia medica*, anatomy, and the practice of medicine, has been attended to in the order prescribed by the Regulations.

The testimonials of attendance on lectures, and medical practice, must be given on a printed form, with which students will be supplied, on application, at the under-mentioned places:—In London, at the beadle's office, at this Hall; in Edinburgh, at Messrs. Mac Lachlan and Stewart's, booksellers; in Dublin, at Messrs. Hodges and Smith's, booksellers; in the provincial towns, where there are medical schools, from the gentlemen who keep the registers of the schools.

No other form of testimonial will be received; and no attendance on lectures will qualify a candidate for examination, unless the lecturer is recognised by the Court.

The names of the lecturers recognised by the Court may be seen on application to the several gentlemen acting as registrars in the provincial schools, and at the beadle's office at the Hall.

The teachers in London, Dublin, Edinburgh, Glasgow, and Aberdeen, recognised by the constituted medical authorities in those places respectively, are recognised by the Court; and certificates given by the medical professors in the continental universities are also recognised and received by the Court.

Gentlemen wishing to be recognised as lecturers, are referred to the following resolutions of the Court, passed on the 18th of November, 1830, viz.

Resolved,—That no member of the Court of Examiners shall be recognised as a lecturer on any branch of medical science.

That the Court will not recognise any teacher who may give lectures on more than two branches of medical science.

That the Court will not recognise a teacher until he has given a public course of lectures on the subject he purposes to teach; but if, after such preliminary courses of lectures, the teacher should be recognised, the student's certificate of attendance on that course will be received.

That the Court will not recognise a teacher until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and also of his ability as a teacher thereof, from persons of acknowledged talents and of distinguished acquirements in the particular branch of science in question.

That satisfactory assurance shall also be given that the teacher is in possession of the means requisite for the full illustration of his lectures, viz. that he has, if lecturing—

On chemistry, a laboratory and competent apparatus; on *materia medica*, a museum sufficiently extensive; on anatomy and physiology, a museum sufficiently well furnished with preparations, and the means of procuring recent subjects for demonstration; on botany, a *hortus siccus*, plates or drawings, and the means of procuring fresh specimens; on midwifery, a museum, and such an appointment in a public midwifery institution as may enable him to give his pupils practical instructions.

That the lecturer on the principles and practice of medicine must be, if he lectures in London, or within seven miles thereof, a Fellow, Candidate, or Licentiate of the Royal College of Physicians of London; and if he lectures beyond seven miles from London, and should not be thus qualified, he must be a graduated Doctor of Medicine of a British university of four years' standing (unless previously to his graduation he had been for four years a Licentiate of this Court).

That the lecturer on *materia medica* and therapeutics must be a Fellow, Candidate, or Licentiate of the Royal College of Physicians of London; a graduated Doctor of Medicine of a British University of four years' standing (unless previously to his graduation he had been for the same length of time a Licentiate of this Court); or he must be a Licentiate of this Court of four years' standing.

That the lecturer on anatomy and physiology must either be recognised by the Royal College of Surgeons of London, or must be a member of that College of four years' standing.

That the Demonstrator of Anatomy must either be recognised by the Royal College of Surgeons of London, or must be a member of that College.

Hospitals as Schools of Practical Medicine.

No hospital (not already recognised) will in future be placed upon the list of recognised schools of practical medicine, unless it is situated in London, or in one of the provincial cities or towns in which schools of medicine are established, and the physicians attached to it give a full course of instruction in clinical medicine and morbid anatomy.

The hospital must contain one hundred patients at least, and must be under the care of at least two physicians, each of whom must be a Fellow, Candidate, or Licentiate of the Royal College of Physicians of London, if the hospital be situated in London; and if in a provincial town, the physicians, if not members of the Royal College of Physicians, must be graduated Doctors of Medicine of a British university.

The apothecary of the hospital must be legally qualified, either by having been in practice prior to or on the 1st August, 1815, or by having received a certificate of qualification from the Court of Examiners.

Dispensaries as Schools of Practical Medicine.

The Court will recognise, as schools of practical medicine, such dispensaries as shall give satisfactory evidence on the following points, viz.:

That the Dispensary is situated in some city or town in which there is a medical school recognised by the Court.

That the rules for the government of the Dispensary permit the attendance of students, and that the physicians afford them instruction and opportunities of acquiring practical knowledge in medicine.

That the Dispensary (if within the limit of the jurisdiction of the Royal College of Physicians of London) is under the medical care of at least two physicians, each of whom is a Fellow, Candidate, or Licentiate of the Royal College; and if beyond these limits, that it is under the care of at least two physicians, who, if not so qualified, are graduated Doctors of Medicine of a British university, of four years' standing.

And that the apothecary of the Dispensary is legally qualified, either by having been in practice prior to or on the 1st of August 1815, or by having received a certificate of qualification from the Court of Examiners.

Registration.

A book is kept at the hall of the Society for the registration, at stated times, of the names of students, and of the lectures, hospitals, or dispensaries, they attend.

All students, in London, are required to appear personally, and to register the several classes for which they have taken tickets; and those only will be considered to have complied with the regulations of the Court whose names and classes in the register correspond with the testimonials of the teachers.

The books will be open for the registration of tickets authorising the attendance of students on lectures and medical practice during the *first twenty-one days* of October, and the *first fourteen days* of May, from nine o'clock until two; and for the registration of certificates of having *duly attended* such lectures or medical practice during the *last fourteen days* of April and of July.

The Court also require students at the provincial medical schools to register their names in their own hand-writing, in the order above stated, with the registrar of each respective school; and the registrars are requested to furnish the Court of Examiners with a copy of each registration *immediately* after its termination, as those students only will be admitted to examination whose registrations have been *duly* communicated to the Court.

Examination.

Every person offering himself for examination must give notice in writing to the clerk of the society, on or before the Monday previously to the day of examination, and must also, at the same time, deposit all the required testimonials at the office of the beadle, where attendance is given every day (except Sunday) from nine until two o'clock.

The examination of the candidate for a certificate of qualification to practise as an apothecary, will be as follows:—

In translating parts of Celsus de Medicinâ and Gregory's *Conspectus Medicinæ Theoreticæ*, in physicians' prescriptions, and the *Pharmacopœia Londinensis*; in chemistry; in *materia medica* and therapeutics; in botany; in anatomy and physiology; in the principles and practice of medicine.

The examination of a candidate for a certificate of qualification to act as an assistant to an apothecary, in compounding and dispensing medicines, will be as follow:—In translating physicians' prescriptions, and parts of the *Pharmacopœia Londinensis*; in pharmacy and *materia medica*.

By the 22nd section of the act of parliament, no rejected candidate for a certificate to practise as an apothecary, can be re-examined until the expiration of six months from his former examination; and no rejected candidate as an assistant until the expiration of three months.

The Court meet in the Hall every Thursday, where candidates are required to attend at a quarter before four o'clock.

By order of the Court,

JOHN WATSON, Sec.

Apothecaries' Hall, April 23, 1835.

APPOINTMENTS.

Naval.—Mr. Leonard Dolbin Buchanan and Mr. James Derriman, super.-assistant-surgeons to the Victory.

Military.—Staff Assist.-Surg. Archibald Alexander to be assistant-surgeon of the 25th Foot. Mr. Francis Robert Waring to be assist.-surgeon to the Forces, vice Alexander. Staff Assistant-Surgeons Dartnell and Ledingham to take charge of detachments about to proceed to Canada.

General.—Dr. Alexander Hannay, of Dublin-street, Liverpool, physician to the Northern Hospital in that town. Dr. Alexander Morrison, of Cavendish-square, one of the physicians of the Bridewell and Bethlem Hospitals. Dr. Powell to the Ballinamore Dispensary, Ireland. Dr. Luard, physician to the Warneford Hospital, Leamington.

Resignations.—Dr. Ash, physician, and Mr. Cooper, apothecary, to the Norwich Dispensary.

MISCELLANEOUS.

Materia versus Pus.—A physician met an apothecary at a patient's house, and, after the doctor had written his prescription, he took from the table, in the presence of the patient, a phial of medicine the learned gentleman had prescribed the day before, and observed to the apothecary he did not think his drugs were of the best quality; to which the apothecary, who by this remark was placed in a *truly awkward situation*, after recovering himself a little, made this reply:—"They must, sir, indeed, be very bad, if they are like your Latin." The doctor, *iratus ilaque*, returned home. In a few weeks from this visit, was published, with his name, a collection of medical cases, written in elegant and classic Latin. He was complimented greatly on this production. The lapse only of a very short time brought to light the following circumstance. Some officious persons circulated the report that the Latin was not the doctor's; for none but an *ignoramus* would have substituted the word *materia* for *pus*. This mistake proved unfortunate, as it let the cat out of the bag. It soon spread over the town that the cases were put into Latin by a dealer in crockery-ware, and the doctor's literary fame expired in a *crack*.—*Rabies Piratica*

A most unwarrantable interference on the part of the Board of Management of the Kent and Canterbury Hospital with Dr. Chisholm, the physician, has just been very properly set aside by the general body of the Governors. The latter body, after a very careful investigation of the case, and a considerable discussion of the whole matter, came to resolutions approbatory of Dr. C.'s conduct, and re-electing him physician, as fully deserving the confidence of the supporters of the hospital. The following is the resolution adopted with reference to the Board of Management:—"That the Board of Management have exceeded the powers confided to them by the Board of Governors, in adopting the resolution,— 'That the Board feel it their duty, *under the circumstances*, to abstain from recommending Dr. Chisholm for the ensuing year.'"

DEATHS.

Dr. Robert Hooper, of Staunmore, Middlesex, formerly of Saville-row. Dr. John Vetch, of the Charter House, London. Dr. Edward Long Fox, of Bringtonton House, near Bristol. Dr. Peter Shee, of Kilkenny. Mr. William Martin John Parry, assistant-surgeon 3rd regt. Light Cavalry, Bombay, son of Dr. Parry, of Fakenham. Mr. Joseph Pass, surgeon, of Howden, Yorkshire. Mr. A. H. Gimber, assistant-surgeon of the *Calcedonia*, drowned by the upsetting of a boat in the Bay of Vourla. Mr. Murray, of Collingham,

near Newark, surgeon. Mr. Alexander C. Bell, late assistant-surgeon of the Victory. Mr. John Newton, of Ashton under-Lyne, surgeon.

Aged 59, at the dispensary in this town, Eliz. Maurice, midwife to that institution. Mrs. Maurice was appointed midwife to the dispensary in June, 1819, previous to which time she occupied a similar situation in the Westminster Lying-In Hospital, where she practised under the able superintendence of her relation the matron, Mrs. Wright, after being instructed in the art of midwifery by attendance upon the lectures of the late Dr. Thynne, the physician to that establishment. From the period of her being appointed midwife to the dispensary to the time of her death, Mrs. Maurice discharged the important duties of her office in a manner so exemplary, as to gain for her the esteem and gratitude of all the patients entrusted to her care, the confidence of the medical gentlemen attached to the institution, and the entire satisfaction of the committee and governors.—*Birmingham Paper*.

WEEKLY BILL OF MORTALITY.

London, Tuesday, May 12, 1835.

Abscess	7	Hooping-Cough	7
Age and Debility	51	Inflammation	24
Apoplexy	10	Inflammation of the Brain	1
Asthma	13	Inflammation of the Bowels & Stomach	6
Cancer	3	Inflammation of the Lungs and Pleura	9
Childbirth	7	Insanity	2
Consumption	65	Liver, Diseased	3
Convulsions	31	Measles	15
Croup	5	Mortification	6
Denition, or Teeth-ing	7	Paralysis	4
Diarrhœa	1	Rheumatism	1
Dropsy	11	Small Pox	23
Dropsy on the Brain	11	Sore Throat & Quinsey	1
Dropsy on the Chest	1	Thrush	4
Epilepsy	2	Tumour	1
Erysipelas	2	Unknown Causes	30
Fever	6	Stillborn	14
Fever, Scarlet	5		
Fever, Typhus	4		
Heart, Diseased	2		

Buried, Males 193 Females 210 Total 405

Increase in Burials reported this week, 69.

BOOKS RECEIVED.

The Principles and Practice of Obstetric Medicine, in a Series of Systematic Dissertations on Midwifery, and on the Diseases of Women and Children. Illustrated by numerous plates. By Dr. DAVIES, Professor of Midwifery in the University of London. Part XLI.

CORRESPONDENTS.

We have received several communications respecting the teachers of St. Bartholomew's Hospital, which shall be attended to in our next.

E. M.—His article on *Fistula* will not suit us.

Veritas.—Before *Veritas* thinks of communicating any other like information, we should recommend him to look at the bottom of this page, where he will see that all communications must be "post paid," or else for the future they will be rejected.

A Country Practitioner.—His proposition we will agree to.

Press of matter has prevented our inserting the reports of the Societies in this number.

In our next will appear the Medico-Chirurgical, Medico-Botanical, and the London Medical.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE XII.

Persesquinitrate of Iron in Chronic Diarrhœa—Blueness of the Fingers and Toes in Fever—Some Account of the Yellow Fever which prevailed in Dublin in 1827—Newly observed Affection of the Thyroid Gland in Females—Its connexion with Palpitation—with Fits of Hysteria—Erysipelas—Remarks on the Formation of Acidity of the Stomach in Indigestion—Psoriasis—Treatment by Arsenic.

GENTLEMEN,—Having lately used, with very considerable success, a preparation introduced by Dr. Christison, namely, the persesquinitrate of iron, I shall make a few observations here on its properties and use.

The combination of iron with nitric acid forms a remedy possessing tonic, and, at the same time, astringent powers, and hence peculiarly well adapted for the treatment of certain forms of chronic diarrhœa and dysentery. You will be consulted by females of a delicate and weakly habit, who frequently exhibit symptoms of nervous derangement, such as palpitations, sleeplessness, and headach, who are easily excited or alarmed, have a tendency to emaciation and paleness, and have little or no appetite. Combined with these general symptoms, you find that they have been labouring under diarrhœa for weeks, and even months, and that this, with the other causes of debility, has rendered their condition exceedingly uncomfortable. You will also be informed by the patient, that she has tried many remedies without benefit, and that she is extremely anxious to have something done to give relief; and hence it is a matter of importance to be acquainted with any remedy which may be likely to prove serviceable in such emergencies.

It would appear that this form of diarrhœa does not depend on an inflammatory condition of the stomach and intestinal canal, for the indications of inflammation are absent, such as pain, tenderness on pressure, thirst, redness of tongue, and severe or continued griping. It would rather seem to be connected with congestion of the mucous membrane of the digestive tube of a passive nature, and resembling the scrofulous; it is also of an unmanageable character, and very seldom amenable to the ordinary modes of treatment. The common astringent remedies totally fail; chalk mixture, kino, rhatany root, and catechu, are useless, and in such cases it has been observed that opium is generally injurious. If you prescribe opium it certainly checks the disease for a time, but this temporary relief is accompanied by debility, malaise, restlessness, and many other uneasy symptoms, and the diarrhœa soon returns, and is as bad as ever. The medicine which I have found most effectual in such cases, is the persesquinitrate of iron, in the form recommended by Dr. Christison. With it I have succeeded, within the last two months, in curing two cases which had been exceedingly obstinate and of very considerable duration, the disease having in one case resisted all the efforts of medical skill for seven months, and in the other for two years. Seven or eight drops of the liq. ferri persesquinitratis, increased gradually to twelve or fifteen in the course of the day, was the quantity prescribed in both cases. In the course of four days a slight diminution of the diarrhœa was perceived, in a fortnight the patient felt much better, and in a month or five weeks it had disappeared altogether. This took place without being followed by any bad effects; there was no swelling of the stomach, no tympanitis, no tormina, no restlessness or nervous derangement; the patients recovered their health and strength, and the cure was at once safe and permanent.

The effect of this remedy admits of an explanation on either of two grounds. You are aware that nitric acid exercises a very powerful influence over many morbid discharges. In chronic diarrhœa or dysentery, and in a certain form of diabetes, it is one of the most

efficient and appropriate medicines which can be prescribed. We can therefore understand its peculiar adaptation to the case of which I have spoken. The nature of the complaint requires a tonic as well as an astringent; and you all know that nitric acid is used as a tonic in many cases attended with debility and emaciation. With respect to iron, its mode of action is equally intelligible. Many of the salts of iron exert a very remarkable influence on the conditions of mucous membranes. The sulphate, tartrate, and many other preparations, are prescribed with great advantage in chronic fluxes from mucous membrane; hence the benefit so frequently derived from the use of Griffiths' myrrh mixture in the treatment of chronic bronchitis characterised by a supersecretion from the bronchial membrane, unaccompanied by fever. You perceive, then, both the medicines which enter into the composition of persesquinitrate of iron are well calculated to check morbid discharges and strengthen the tone of the system. The only objection to this remedy is, that it is apt to spoil: if kept longer than a week it is decomposed, and hence you should always take care to have it quite fresh when you prescribe it, in order to secure its full operation.

I have lately had occasion to observe the good effects resulting from a combination of nitric acid with vegetable astringents, in a little girl three years of age, in whose case I was consulted by Mr. Wallace of Townsend-street. She was of a strumous habit; her appearance was that of a delicate but not very sickly child, and, in spite of the long continuance of the complaint, she was active and lively, although her appetite was small. Four or five times during the day, and six or seven during the night, she was seized with a slight griping pain, and a sudden desire to evacuate the bowels. Each evacuation was scanty, and consisting of muco-fæcal matter. A great variety of the usual remedies had been tried—alterative doses of mercury, purgatives, astringents, opiates, &c. I prescribed the following mixture, which had the happiest effect, and performed a speedy cure:

R. Decocti hæmatoxyli (P.D.), $\bar{3}$ iv;
 Vini rubri Lusitanici, $\bar{3}$ j;
 Acidi nitrici dilut. gt. x;
 Tincturæ opii, gt. v;
 M. sumat. cochl. j. medium, quater in die.

You will recollect, gentlemen, that nitric acid, when given in large doses, often produces diarrhœa, as in the common combination of one drachm of dilute acid with a pint of decoction of sarsaparilla.

A man in the Fever Ward, who has had fever in a very severe form, has latterly presented a tendency to have the circulation deranged in a very peculiar manner in certain parts of his body. Soon after his admission the tip of the nose became of a bluish-black colour, and within the last two days his toes began to assume a similar hue. This is a very

curious symptom, and demands a few observations. Here we find a small portion of the skin of the nose becomes injected, the blood stagnates in the capillaries, the parts assume a blue colour, and a kind of morbid desiccation takes place in the cuticle and a thin layer of the skin is thrown off, which is succeeded by the rapid formation of fresh cutaneous substance. In the toes the disease is also superficial: it does not engage the whole depth of the skin, or reach the subcutaneous cellular substance, and it is surrounded by a margin of a vivid red colour at the line of demarcation. In both places the parts are tender to the touch, but there is no swelling. It is therefore a superficial disease, not likely to be followed by the death of the parts affected, and differing in this respect from that form of gangrene in old persons which commences with a somewhat similar discolouration of the skin.

Now, whence arose the blueness in this case? It is difficult to give a satisfactory answer to this question, but we may arrive at something like a solution by examining the circumstances under which the superficial parts of the body undergo similar changes of colour. If you tie a thread round the first joint of the finger, you will observe that very soon after the circulation has been impeded, the top of the finger will become blue, and, in the same proportion, painful. Here we produce artificially a state of the top of the finger bearing a very remarkable analogy, so far as pain and change of hue are concerned, to the state of the nose and toes in this patient. Again, we find that without any artificial obstruction the influence of certain physical agents will generate in the vessels of various parts of the body a state of circulation closely resembling that which is the result of the impediment produced by art. Thus, sharp cold, as you all know, will produce blueness and a painful state of the integuments of the nose, fingers, and other parts of the body. I remember a very curious case of this kind which continued for a very considerable time; the patient was for several weeks in the Meath Hospital. He was a groom or helper in a livery stable, and being obliged to have his hands almost constantly in cold water at an inclement season of the year, the capillaries of the tips of the fingers in both his hands became so deranged in their condition, that they did not recover their proper degree of vitality and tone for many months. When he permitted his hands to hang for any length of time, or when they were exposed to the ordinary winter temperature of the air, the pain and blueness increased to a considerable degree, but if he held them up or plunged them into tepid water, the pain ceased, and the blueness became much diminished, or even went away altogether.

These considerations will furnish a key towards understanding the cause of the blueness in this case. With respect to the treatment, I may observe, that in such cases we have seen the best effects from artificially

depleting that portion of the vascular system in which the local congestion and pain are seated. If a ligature were tied round your finger, and you wished to relieve the pain and reduce the congestion, without removing the artificial cause of the obstruction, you would apply leeches to the part, and thus give relief. It was on this principle that I was induced to apply leeches to those parts in which a change of colour and an impairment of sensibility appeared to be connected with some obstruction in the capillary system. You will recollect that this man's toes were better after being leeches, and so far the practice appears to be borne out by the result of experience. You should not in such cases be led away by the theory of our ancestors, who referred this condition of parts to vascular debility. A vast deal has been said and written with respect to the state of the capillaries in disease; some say, that to restore the healthy action of a part we must debilitate; others, that we must excite the capillaries. This point has engaged the talents of Dr. Thomson, Dr. W. Philip, and several other writers, but it still remains undecided, nor do I think it can ever be settled. For my own part, I am satisfied with being able to discover the means of relieving disease, and give myself very little trouble about theoretical questions, which seem, under existing circumstances, to be placed beyond the reach of human intellect. In the case before us, the modes which were most successfully employed were leeches, emollient poultices, and fomenting the parts with tepid water.

We do not often witness this blueness of the integuments in the fevers of Dublin; during the epidemic of 1827, however, it was a matter of frequent occurrence. That epidemic was also very remarkable in many other points of view; it was, if I may so express myself, a bad gastro-typhus. It was a fever in which the chief seats of congestion and disease were the stomach and small intestine; at the commencement the re-action of the system was exceedingly violent, but this subsided very quickly, and was followed by a stage of awful prostration. The chief interest, however, attached to it, arose from the circumstance of its forming a very striking link of connexion between the ordinary gastric fever of Ireland and the yellow fever of warm countries. The phenomena which characterised this epidemic convinced me and every one who witnessed it, that the common gastro-typhus of this country, and the yellow fever of America, Gibraltar, and other places, differ only in degree, and not in nature. The disease set in with all the usual symptoms, violent heat of skin, a quick small pulse, sweating, restlessness, thirst, nausea, and abdominal tenderness; this state of things went on for two or three days, and then the patients became suddenly and universally jaundiced. The symptoms now began to assume a greater degree of malignity, vomiting came on, a large quantity

of dark-coloured substance, resembling coffee grounds, was thrown up, and the case most commonly had a fatal termination. Here, gentlemen, you perceive we had yellow fever with black vomit. I examined the bodies of about twenty-five persons who died in this hospital, and found that the intestinal canal presented an exact fac-simile of the morbid appearances described by Jackson, Bancroft, and various other writers on yellow fever.

In that fever I had frequent opportunities of observing the change in the capillaries of the part, which accompanied the appearance of blueness of the nose. To a person who saw the patient with his nose of the natural hue this morning, and found it quite blue on the next, the change appeared strange and unaccountable; but as I spent a great portion of my time in the wards, I had an opportunity of marking the transition, and detecting the modifications which preceded blueness. The part about to become blue became altered in a very singular manner. It first became elevated in its temperature, but at the same time it grew paler. I cannot explain this. Increased heat would seem to prove the existence of increased vascularity, fading of colour would seem to prove decrease of vascularity. Notwithstanding this, these apparently incompatible states co-existed; the parts were blanched, and at the same time felt hot to the touch. Where the nose was about to become blue, it first assumed a yellowish white colour, and looked very like a wax nose; in the course of six or eight hours this appearance subsided and it became red, and after a short time this colour was replaced by a purple or dark blue tinge. The same order of phenomena took place with respect to the toes, and in a few cases the disease appeared in the fingers. Such cases were ordinarily accompanied by so bad a state of febrile symptoms, that the patients seldom recovered; indeed they died so soon after its supervention, that we had no opportunities of observing what course it would take, or how it would terminate. The appearance which patients labouring under this affection exhibited, was very extraordinary; they were all deeply jaundiced, and the deep yellow of the face made a singularly hideous contrast with the indigo blue of the nose*.

With respect to the vomiting a substance resembling coffee grounds, so frequently observed in this epidemic, I may state that it appeared to be identical in its nature with the black vomit of yellow fever. You are aware that the matter rejected under such circumstances is produced by an oozing of blood from the surface of the stomach and duodenum. A quantity of blood is poured out from the diseased surface of the mucous membrane of

* The remarkable epidemic fever of 1827 was described in a monograph printed by me and Dr. Stokes for the use of the students of the Meath Hospital.

the stomach, this remains in the stomach for some time and coagulates, the secretions of that organ act on it, and change it to a black colour, in which state it is thrown up. This is the case in yellow fever, and such also was the origin of the black vomit in the fever of 1827.

I may observe that in that epidemic, as well as in the present, a close inquiry into the history of numerous cases has convinced me that the gastro-typhus of this country, as well as the yellow fever of warmer latitudes, may arise spontaneously, and be propagated by contagion. This, I believe, is a fact which every physician who has seen much of fever has not the slightest doubt of. We have all repeatedly seen instances of persons catching cold while the system was in a relaxed or debilitated state; we have seen this cold followed by violent feverish symptoms, and we have observed these symptoms pass gradually into fever of a typhus character, and capable of being propagated by contagion. So many examples of this have now occurred, that there can be no doubt that fever may arise spontaneously, that it may become in this way sporadic, and, finally, epidemic. At certain periods it appears to be a matter of very little consequence, with regard to the mass of society in general, how many sporadic cases of this description may occur, but at other periods, and under a certain state of atmosphere, the disease becomes extensively diffused, and assumes the character of an epidemic. Here each individual case proves a centre of contagion, from which the disease spreads on every side. On the other hand, fever may originate spontaneously, assume a typhoid character, and yet produce no contagion. Recollecting these circumstances, you will be able to reconcile the conflicting opinions of those who have argued so hotly respecting the nature of yellow fever, some asserting that it is always contagious, others never. The fact is, that both are right and both wrong; fever may originate spontaneously and without contagion, but it may also be produced by contagion, and it may, under one class of circumstances, run through its course without being communicated to others, whereas under a different state of things each case becomes a centre from which the disease spreads on every side. In the present epidemic of maculated or spotted fever, the contagious nature of the disease was strongly exemplified, for more than twenty of the students who were in the habit of visiting the fever wards in the Meath Hospital were attacked with spotted fever in the course of two months. Although the disease was very violent in many, and serious in all, Dr. Stokes and I lost but one of these students; we had every reason, therefore, to congratulate ourselves on the success of the treatment we employed. I shall return to this subject hereafter.

I have lately seen three cases of violent and long continued palpitations in females, in each of which the same peculiarity presented itself,

viz. enlargement of the thyroid gland; the size of this gland, at all times considerably greater than natural, was subject to remarkable variations in every one of these patients. When the palpitations were violent the gland used notably to swell and become distended, having all the appearance of being increased in size in consequence of an interstitial and sudden effusion of fluid into its substance. The swelling immediately began to subside as the violence of the paroxysm of palpitation decreased, and during the intervals the size of the gland remained stationary. Its increase of size and the variations to which it was liable had attracted forcibly the attention both of the patients and of their friends. There was not the slightest evidence of any thing like inflammation of the gland. One of these ladies, residing in the neighbourhood of Black Rock, was seen by Dr. Harvey and Dr. William Stokes, another of them, the wife of a clergyman in the county of Wicklow, was seen by Dr. Marsh, and the third lives in Grafton-street. The palpitations have in all lasted considerably more than a year, and with such violence as to be at times exceedingly distressing, and yet there seems no certain grounds for concluding that organic disease of the heart exists. In one the beating of the heart could be heard during the paroxysm at some distance from the bed, a phenomenon I had never before witnessed, and which strongly excited my attention and curiosity. She herself, her friends, and Dr. Harvey all testified the frequency of this occurrence, and said that the sound was at times much louder than when I examined the patient, and yet I could distinctly hear the heart beating when my ear was distant at least four feet from her chest! It was the first or dull sound which was thus audible. This fact is well worthy of notice, and when duly considered appears to favour the explanation lately given by Magendie of the causes of the sounds produced during the heart's action, for none of those previously proposed seem to me capable of accounting for a sound so loud and so distinct. But to return to our subject. The sudden manner in which the thyroid in the above three females used to increase and again diminish in size, and the connexion of this with the state of the heart's action, are circumstances which may be considered as indicating that the thyroid is slightly analogous in structure to the tissues properly called erectile. It is well known that no part of the body is so subject to increase in size as the thyroid gland, and not unfrequently this increase has been observed to be remarkably rapid, constituting the different varieties of bronchocele or goitre. The enlargement of the thyroid, of which I am now speaking, seems to be essentially different from goitre in not attaining a size at all equal to that observed in the latter disease. Indeed this enlargement deserves rather the name of hypertrophy, and is at once distinguishable from bronchocele by its becoming sta-

tionary, just at that period of its development when the growth of the latter usually begins to be accelerated. In fact, although the tumour is very observable when the attention is directed to it, yet it never amounts to actual deformity. The well known connexion which exists between the uterine functions of the female and the development of the thyroid observed at puberty, renders this affection worthy of attention, particularly when we find it is so closely related by sympathy to those palpitations of the heart which are of so frequent occurrence in hysterical and nervous females.

Another fact, well worthy of notice, is that females liable to attacks of palpitations almost invariably complain of a sense of fulness, referred to the throat, and exactly corresponding to the situation of the thyroid. This sensation only continues while the paroxysm of palpitation lasts, and frequently is so urgent as forcibly to attract the patient's notice, who now complains of its inducing a sense of suffocation. Here the interesting question occurs whether this feeling of something that impedes the respiration at the bottom of the throat, during the hysterical fit, and which has been included under the general term *globus hystericus*,—the question arises, I say, whether this feeling is always of purely nervous origin. To me it appears probable that it is often induced by the pressure arising from a sudden enlargement of the thyroid, which enlargement subsides as soon as the fit is over. Of this I am certain, that the lump in the throat, of which such females complain, is often exactly referred to the situation of the thyroid; and indeed I have been told by other practitioners, upon the accuracy of whose observations I can rely, that this swelling in the throat of females during the hysteric paroxysm has more than once excited their wonder. It is obvious, gentlemen, that if palpitations depending on functional disease of the heart are capable of exciting this swollen state of the thyroid, we may expect to observe the tumefaction of this gland also where the palpitation depends on organic disease of the heart, as in the following case detailed to me by a friend.

A lady, aged twenty, became affected with some symptoms which were supposed to be hysterical. This occurred more than two years ago; her health previously had been good. After she had been in this nervous state about three months, it was observed that her pulse had become singularly rapid. This rapidity existed without any apparent cause, and was constant, the pulse being never under 120, and often much higher. She next complained of weakness on exertion, and began to look pale and thin. Thus she continued for a year, but during this time she manifestly lost ground on the whole, the rapidity of the heart's action having never ceased. It was now observed that the eyes assumed a singular appearance, for the eye-

balls were apparently enlarged, so that when she slept or tried to shut her eyes, the lids were incapable of closing. When the eyes were open, the white sclerotic could be seen, to a breadth of several lines, all round the cornea. In a few months, the action of the heart continuing with unceasing violence, a tumour, of a horse-shoe shape, appeared on the front of the throat and exactly in the situation of the thyroid gland. This was at first soft but soon attained a greater hardness though still elastic. From the time it was first observed, it has increased little, if at all, in size, and is now about thrice the natural bulk of the fully developed gland in a female after the age of puberty. It is somewhat larger on the right side than on the left. A circumstance well worthy of notice has been observed in this young lady's case, and which may serve to throw some light on the nature of this thyroid tumefaction. The circumstance I allude to is, that from an early period of the disease a remarkable disproportion was found to exist between the beats of the radial and of the carotid arteries, the pulsations of the former being comparatively feeble, while those of the latter were violent, causing a most evident throbbing of the neck, and accompanied by a loud rustling sound. In about fourteen months the heart presented all the signs of Laennec's passive aneurism; the tumour in the neck is subject to remarkable variations in size, sometimes diminishing nearly one half. None of her family have had goitres, nor was she ever in any of the usual localities of the disease.

Some time ago, you will recollect, we had a case of erysipelas in a young woman, which came on towards the termination of fever; a similar occurrence has taken place in a patient in the male fever ward. A man who has been for some time labouring under fever, got about two days since an attack of erysipelas of the scalp, spreading downwards over the neck and shoulders. The man had been ill of fever of a nervous type, and unaccompanied by any decided marks of visceral congestion; his condition was to a certain extent modified by previous habits of intemperance, but still his strength was not much prostrated, nor did he appear to be in a very dangerous state. About the fourth week of his illness he gets an attack of erysipelas of the scalp, which runs downwards over the neck and shoulders, and threatens very dangerous if not fatal consequences. How were we to treat this case? The man's constitution, habits, and the period of his fever, contra-indicated depletion in any form, and the only thing which we could expect benefit from, was the use of sulphate of quinine, which we had prescribed in two former cases of this kind with good effects. We gave it here also in the form of an enema, for the state of the man's stomach was such as to preclude the possibility of giving it by the mouth without hazard. An enema, composed of

five grains of quinine, five drops of laudanum, and two or three ounces of mucilage of starch, was injected three times a-day. I cannot as yet state what the result of this case may be, but the disease is certainly not progressing, and the man says he feels better to-day, so that there are grounds to hope for a favourable termination.

Internally I have given this man magnesia with camphor mixture, on an empirical principle. It has been stated by some of the older writers, that when erysipelas occurs in a weak habit, or supervenes on other diseases, that there is an ascendent condition of the stomach, and that it is on this condition the erysipelatous tendency chiefly depends. I have with this view been induced to try the exhibition of small doses of magnesia; I have ordered a mixture composed of six ounces of camphor mixture with a drachm of magnesia, of which the patient is to take an ounce every second hour.

I may take this opportunity of observing that, since I published some remarks in the *Dublin Medical Journal*, upon the occasional symmetrical march of erysipelas at both sides of the median line, I have seen other examples of this symmetry. One occurred very lately in Sir P. Dun's Hospital, in a woman in whom the point of departure for the disease was the face. From this, the erysipelas spread over the scalp, and then advanced downwards over the neck and shoulders. During its daily progress, I pointed out to the students how precisely its outline at one side of the median line corresponded with that at the other. This coincidence was the more singular, for the boundary of the advancing erysipelas was at each side very irregular in form. I think, therefore, that more accurate observations on this subject will cause a change of opinion in the mind of a learned reviewer in Johnson's *Medico-Chirurgical Review*.

There is another case, in which I gave magnesia to a man labouring under a particular species of indigestion. He had been for a long time suffering from chronic rheumatism, and this was combined with dyspepsia, characterised by a tendency to supersecretion of acid in the stomach, with gastrodynia and sour eructations. In addition to anti-rheumatic medicines, and enemata to keep the bowels open, we prescribed the subnitrate of bismuth with magnesia, for the purpose of relieving pain and acidity. In gastrodynia, with increased secretion of acid from the stomach, one of the best remedies we possess is the subnitrate of bismuth, with which I am in the habit of combining morphia, or, as in the present case, magnesia. I ordered ten grains of magnesia, twenty of powdered gum Arabic, and six of the subnitrate of bismuth, to be taken two or three times a-day, according to circumstances: this powder was to be followed by a table-spoonful of water containing one-sixteenth of a grain of muriate of morphia. In such cases, if milk does not disagree with the patient, you may

pour the powder into a quantity of boiled milk; allow it to cool, and then stir it with a spoon, and make the patient swallow it. The gum Arabic is used for its demulcent properties, and because it enables the patient to swallow the powder with more facility; and the fluid in which you mix the powder, whether it be water or milk, is to be used warm in order to dissolve the gum more speedily. This is a very good combination, and I have seen many cases of dyspepsia, with acid eructations, which had resisted bismuth, prussic acid, or morphia, given singly, yield to it.

I need not state to you the reasons why magnesia and other antacid remedies are given in such cases, but it may be necessary to mention briefly the principle on which opiates are prescribed. Dr. Elliotson has shewn, that many of the morbid states of the stomach depend on deranged nervous energy, and that, in such cases, the most efficient means we can use are narcotics. As to the subnitrate of bismuth, its mode of action is not very obvious; but we know that the metallic salts possess great influence over various nervous diseases, as well as over morbid secretions. Witness the effects of carbonate of iron, oxide of zinc, the preparations of arsenic and antimony, and several others. On this account we prescribed the subnitrate, hoping to derive some benefit from its use, as well with respect to checking the sour eructations, as to relieving the gastrodynia. It may be well to make a few observations in explanation of the manner in which tonics and narcotics act in diseases of the stomach. Formerly physiologists were of opinion, that in weakly stomachs the act of digestion was accompanied by the formation of acid and flatulence, because the food being imperfectly acted on was allowed to undergo the process of fermentation, a process which gave rise to the acid and the wind in the stomach. In compliance with this view, physicians endeavoured to procure relief in these cases by prescribing a regimen little likely to undergo a fermentation capable of causing a production of either air or acid; and they endeavoured to neutralise the bad effects of these, when produced, by means of the administration of alkaline medicines. They used, however, to be astonished at observing that many articles of food, which outside the body never formed any acid during fermentation (or more properly putrefaction), occasioned, nevertheless, when eaten, as much acidity in the stomach as any other aliments.

It was remarked also by practical men, that although present relief was obtained by means of alkalies, yet their constant exhibition seemed rather to increase than diminish the tendency of the formation of acid in the stomach. This fact could not be explained in the then state of physiology. In the year 1821, I read an essay on this subject before the Association of the King and Queen's College of Physicians, in whose transactions it was subsequently published. In this essay I pointed out the true

source of the acidity and flatulence observed in dyspepsia, and proved, contrary to the received opinions, that it was the result of a morbid secretion. In fact, I showed that the stomach has the power, when in health, of secreting acids and air, both essentially necessary for the solution of the alimentary mass; and I proved that in dyspepsia this power is morbidly deranged, in such a manner as to give rise to a supersecretion of acids and air. This view of the subject was soon recognised to be correct, and, in consequence, new methods of treating dyspepsia were proposed. Among the proposals for obviating acidity, that of Dr. Elliotson, who recommended Prussic acids and other narcotics capable of acting upon the nerves of the stomach (through the influence of which secretion is effected), was found to be the most successful, and has been sanctioned by the most extensive experience.

Before I conclude, I shall call your attention to the case of Ellen Farrow, who has been for a considerable time labouring under extensively diffused psoriasis. She was admitted about the beginning of last November, and we are now come to the 10th of December; so that she has been a patient here for nearly six weeks. Her disease is of better than two years' standing, and the eruption covered almost every part of the surface of the upper and lower extremities, the trunk remaining unaffected. The patient, you perceive, is a fine healthy country girl, and though the complaint has lasted so long, her system does not seem to be in the slightest degree impaired; appetite, digestion, and sleep are perfectly good. Now, on examining her soon after her admission, you will recollect that I told you that the duration of the disease, the absence of constitutional irritation, and of irritation in the parts affected by psoriasis, all contra-indicated a mode of treatment which frequently proves highly useful, namely, the antiphlogistic. If called to a case in which the disease was recent, and attended with heat of skin, redness and itching, I would bleed, leech the affected parts, and put the patient on a spare diet. Even in some cases of a chronic character, this treatment may be employed with great advantage. Here, however, the state of the patient was such as not to require antiphlogistics, and accordingly we put her on the use of Fowler's arsenical solution. By the way, when you give this remedy in private practice, where patients or their friends are very curious in scanning your prescription, you may, in order to prevent alarm, or have the action of the medicine interfered with, write on your prescription—"Liquor mineralis Fowleri."

I mention this case of Farren's chiefly for the purpose of showing the extent to which the arsenical solution may be carried. Mind, gentlemen, I do not mean to boast of the quantities of medicine my patients swallow. Some persons appear to think that there is something very brilliant in prescribing enormous doses: I should, however, be very sorry to make such experiments. Arsenic is a very

powerful remedy, and its effect on diseases of the skin can be amply secured by moderate doses; where these fail, it is very often from not continuing the use of the remedy for a sufficient length of time. Latterly this girl has been taking ten drops of Fowler's solution three times a-day, and, as she is getting well, I do not intend to increase the dose. We began with three drops three times a-day: after a few days this was increased to five, and then to seven drops three times daily. She then began to take ten drops three times a-day; but after a few days having got an attack of shivering, followed by symptoms of feverish excitement and herpes labialis, we stopped the arsenic for five days, and then began to give it again in small doses, which were gradually increased until we came to the quantity she is taking at present. Whenever you have a patient under the use of arsenic, you must never omit making daily inquiries as to the state of the head and stomach: if the patient complains of gastrodynia or nausea, if there be pain or giddiness of head, or if, these being absent, a state of feverishness or general nervous excitement supervene, it is a proof that the remedy has been pushed sufficiently far, and under such circumstances you should suspend or give up its employment. In this case, being unwilling to give up the use of arsenic, as it appeared to be curing the patient, I merely suspended it for a few days, and then had recourse to it again. In order, however, to prevent it from acting unfavourably on the stomach, I have latterly prescribed it in the following form:—

R Liq. arsenicalis, ℥ x;

Aquæ distillatæ, ℥ j;

Tinct. opii, ℥ x;

Spirit. lavandulæ, compos. ℥ss.—ft. haust.

This appears to agree very well with the stomach; and as she is improving very rapidly, I intend to continue it for some time without increasing the dose.

The only other point worthy of remark in this case is, that we observed in it a phenomenon connected with the state of the skin, such as usually occurs when a patient is using sulphur or sulphureous waters for the cure of chronic cutaneous affections. After they have been taking these remedies for some time, they experience a slight exacerbation of symptoms, and complain that the eruption is growing worse. This, however, should never induce you to give up the remedy without further trial; for this temporary aggravation generally precedes the disappearance of the disease.

We dismissed a case of dysentery lately from our wards, concerning which I promised to make a few observations. During the months of August and September last, we had in Dublin several cases bearing a decided analogy to the dysentery of Cullen. There were fever, griping, tenesmus, a constant inclination to go to stool without being able to pass anything but a little mucus and blood, and occasionally scybala. In this form of disease, some authors

are inclined to attribute all the bad symptoms to the presence of these scybala, which are small hard lumps of fecal matter, evidently formed in the sacculi of the great intestine. You will find others asserting that this cannot be the case; for in many dysenteries there are no scybala at all, and that, even when they do occur, they have no connexion with the disease. The latter take no account of scybala, while the former state that the diseased condition of the intestine depends upon the irritation produced by them, and that you never can expect to cure the disease without getting rid of them by active purgatives. For my part, I believe that there are certain dysenteric states of the great intestine, in which the main cause of the disease arises from the lodgment of quantities of hard, unhealthy, and long retained fecal matter; but in cases of epidemic dysentery, I do not think that scybala have anything to do with the formation of the disease, or the aggravation of its symptoms.

In the present case, the affection appears to have been pure rectile dysentery depending almost exclusively on inflammation of the rectum, not extending to the sigmoid flexure of the colon, and certainly never as far as its arch. The symptoms present were fever, increased heat of skin and quickness of pulse, with a feeling of heat and pain in the situation of the rectum; for the first day the discharges consisted of mucus and blood, combined with fecal matter, but after this the mucus and blood were voided alone with great griping and tenesmus, and the patient was obliged to get up to the night chair thirty times in the course of twenty-four hours. There was, however, no symptom indicating that any portion of the intestine beyond the rectum was affected. Now, what was the consequence of this state of things? The inflammation of the rectum gave rise to constant spasm of that organ; the colon partook more or less in its spasmodic action, and hence every attempt to pass the stools was resisted. Here, however, the feces lay in a portion of the intestine free from inflammation; they could not produce any aggravation of the symptoms, and the scybala were to be looked on as the consequence and not the cause of the disease. Now, whether purgatives were given by injection or by the mouth; they would have done no good in such a case as this; we might have copious fecal discharges, but without the slightest diminution of the local symptoms. I do not mean to say that there are not dysenteries in which purgatives are highly useful, but in the case before us, where the disease was limited to the rectum, I did not think that any benefit could be derived from them. I confined my attention, therefore, entirely to local means directed to the part inflamed, applied leeches to the anus, gave narcotic and emollient enemata, and after I had in this way relieved pain and irritation, I combined with the enemata, first, a small quantity of the acetate of lead, with the view

of restoring the tone of the relaxed mucous membrane, and afterwards changed it for the sulphate of zinc. Under this treatment the case went on very favourably, and we have been able to dismiss the man in a very short space of time.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXII.

Dystocia from a Faulty State of the Expelling Powers.

GENTLEMEN,—In resuming the subject of my last lecture, I may observe, that the expelling powers may be astonishingly affected by the irregular action of single portions of the uterus against each other. Where, for example, the contractions of the body and cervix uteri do not sufficiently pass into the fundus, so as to give it the due preponderance of expelling force, in this case there is an excessive contraction in more or less of the transverse or middle portion of the body and inferior segment of the uterus; hence the contractions in this part prevail against those of the fundus, or perhaps one side only contracts, and the uterus, therefore, becomes eccentric, from the fundus being pulled down unequally. In the latter case the uterus assumes an oblique form, so that a straight line drawn through the os uteri to the umbilicus will not pass through the fundus uteri. Boer has called this condition *obliquitas uteri quod ad figuram*, to distinguish it from the *obliquitas uteri quod ad situm*, which, as you know, is something quite different. When the uterus is contracted transversely it looks as if it were girt by a tight ring, a state which is still more evident after the delivery of the child, and which is the cause of what is called in this country hour-glass contraction of the uterus; this I shall describe to you more fully shortly. The parts which are in this state of inordinate contraction, whether the body or the mouth of the uterus, are always tender upon pressure; the irregular contractions, as well as the tenderness on pressure, continue during the intervals of pain. If the stricture has its seat in the os uteri, this becomes tightly contracted, hard, unyielding, and painful upon pressure; it does not dilate sufficiently, and the inferior segment of the uterus in general is pushed downwards, while the os uteri is drawn upwards. The contractions are in general irregular and do not last long; sometimes, however, they are very powerful and of long

duration. By the most careful examination no disproportion as to want of room in the pelvis can be discovered, and yet the part of the child which presents does not advance. The progress of the labour becomes exceedingly protracted, for, even during the presence of the most powerful pains, the head remains motionless, or, if it be forced downwards by them, when the pain is over it returns to its former situation; nevertheless, upon examination, we find it not only *not* wedged fast, but sometimes even capable of being moved about by the finger with perfect ease. This results from the stricture of the uterus acting upon the child's body, and preventing it from descending.

The accoucheur is easily led to suspect distortion of the pelvis, or that the head is too large, or that the umbilical cord is too short. If he makes a false diagnosis, and applies the forceps, they will pass up easily enough, and even through the os uteri, but, on introducing them further, they meet with an obstruction, and every attempt to overcome it is excessively painful, and often intolerable. Even if he does succeed in applying them, he finds the greatest opposition when he begins to extract; this also produces much pain, and if, during the traction, he lays his hand upon the abdomen, he will feel that the uterus is pulled down every time that he tries to extract the child. Professor Stark, of Jena, asserts that in most cases of this kind we may pull the head from the body sooner than complete the delivery, and indeed cases have occurred where this has been actually the case. Under these circumstances, we shall be better able to distinguish the nature of this affection in cases where turning becomes necessary, and we have to introduce our hand into the uterus. It appears that this state of irregular contraction of the uterus occurs most frequently in women who have had several children; we nevertheless occasionally see it in cases of first pregnancy.

We are as yet ignorant of the remote cause of this affection; the proximate cause consists either in irregular distribution of the uterine activity, or from single portions of the uterus being peculiarly disposed to this state, as is often the case in faulty position of the child, or after too early rupture of the membranes. Under this head may be also mentioned the introduction of instruments too cold, irritation of the os uteri from rough examination, or from injudicious attempts to dilate it. In the first case, the affection is purely functional, and is nothing more or less than a state of spasm; one finds the pulse spastically contracted, hard, small, and quick. The females most liable to this affection are of very delicate, irritable habit, with a natural disposition to spasmodic affections, hysteria, &c.; fright, anxiety, and other affections of the mind, and sharp, irritating matters in the primæ viæ will also tend to induce it. Since all the parts of the uterus stand in a due balance with each

other in respect to their activity, the cause of this affection may act mechanically thus:—when, for instance, the fundus uteri is distended with blood, by which its power of contraction is impeded, the contractions in the body and cervix uteri obtain a preponderance, and thus stricture will be produced; hence we can explain why we so often observe a bleeding to have good effect in these cases. The danger is here greater than in cases of protracted labour from weakness of the uterus, and especially with respect to the child after rupture of the membranes, for if the stricture has been of long duration, the pressure which it will exert upon the child's body will be sufficient to impede the circulation, both in the body of the child generally, as also in the cord. If the cause be purely functional and consists of spasm, opium will be of great service, and is most efficacious in the form of powder from half a grain to a grain. The combination with ipecacuanha has a very good effect; and if an inflammatory state be present, or the patient be at all feverish, on account of the long duration of labour, it should be combined with neutral salts, in the form of Dover's powder. The liquor opii sedativus with mild diaphoretic salines is a useful combination, or, where the labour is but just commenced, and the bowels appear confined, half an ounce or more of castor oil in peppermint-water, with a full dose of laudanum, or Battley's preparation, will produce much relief. Liniments containing a preparation of opium are useful; if there be much pain, fomentations of camomile flowers, emollient injections of decoctum lini, or of thin gruel with a little tinct. opii, into the rectum or vagina may be tried. Besmearing the os uteri with ext. hyoscyami or ung. belladonnæ has been also recommended; above all, gentlemen, a warm bath is particularly indicated, and frequently performs wonders. If this state result from irritation in the intestinal canal, as from acrid matter, scybala, &c., laxative medicines will be indicated; but these require too much time before they operate sufficiently, for which reason they rather serve to increase the irritation and keep up the spasm. Injections must be therefore had recourse to, and these must be followed by the exhibition of emollient, antispasmodic, and anodyne medicines. Immoderately painful contractions of the uterus can render labour difficult where the patient, especially if she be delicate, exhausts her strength in useless efforts; they also prevent her exerting herself sufficiently during the pains. She must endeavour to support her pains by a proper position and conduct. These painful contractions may arise from irregular contractions of the uterus as respects their direction; they may arise from a rheumatic or inflammatory state of the uterus, or from too great tenderness generally, especially of the parts destined for the passage of the fœtus, or their cause may depend on faulty proportions, either as to the position of the child or as to the relation

between its size and that of the pelvis, &c. In cases of extreme tenderness of the os uteri without inflammation, or where the pains are spasmodic, warm semicupia, opium internally, as well as by injections, will give relief; the application of a sponge dipped in an opiate ointment to the os uteri has also been recommended.

I now come to the consideration of the other chief division of *dystocia ex defectu virtum expellentium*; viz.—where labour is rendered difficult or faulty from a faulty condition of the partly voluntary, partly involuntary, activity destined to support and assist the uterine contraction, this is naturally of much rarer occurrence than the irregularities I have been just treating of, because, as you well know, the abdominal muscles have a much smaller share in the business of labour than the uterus itself. The want of due power to assist the uterus to expel its contents may either depend on great debility, as from disease, exhaustion from straining too violently and too soon, or the other causes which I have before mentioned, or it may arise from impediments to the respiration, as excessive corpulence, distortion of the spine, especially where it is bent inwards above the diaphragm, bronchocele, spasmodic asthma, rheumatism of the diaphragm, ascites or hydrothorax, phthisis, pneumonia, and certain diseases of the circulation, as diseases of the heart, aneurism of the aorta, &c.

If the activity of the organ which plays the chief part in the process of parturition be also impaired, the debility must be very considerable, so as to produce such an incapability of exertion during the pains, that injurious effects will follow this protraction of labour. This state can very seldom be removed so quickly, or the activity of the pains roused in that degree as to bring about the regular action of labour, so that in this case it is imperatively necessary to substitute art for nature. In cases where the patient is excessively fat, or where she is deformed, we must carefully attend to her lying in a convenient posture, so as to facilitate her labour as much as possible. In spasmodic asthma, spasmodic croup, &c., the peculiar treatment which is indicated in these diseases must be had recourse to. Patients suffering from pleurisy or inflammation of the lungs are unable to bear the continued strong inflation of the lungs which is necessary during the third and fourth stages of labour. Under these circumstances the pain and inflammation are unavoidably greatly aggravated. Active bleeding must be used here, but it does not always bring relief or remove the danger, which can only be effected by artificial delivery. It is extraordinary how the uterus will sometimes, as it were, take upon itself the whole brunt of the labour when the powers destined to assist it were at fault, for I have known cases where, in the middle of acute fever or pneumonia, child-birth has been completed so quickly, that the wonder was how the child could be brought

into the world so rapidly without any seeming effort upon the part of the patient.

Among the cases where the causes of insufficient expulsive power of the uterus lie in a functional as well as a mechanical want of proportion or due balance, may be enumerated those where the patient is too young or too much advanced in years, and moreover pregnant for the first time. Under this head, also, come those cases of protracted premature labour, which are so dangerous. At too early an age, especially in tender, weak, and irritable constitutions, the body, and especially the uterus, are not yet fully developed; in short, the woman has not yet attained that capability and power which is necessary to undergo a process which is accompanied with so much exertion and expense of strength as that of labour. The pains are weak, of short duration, and inefficient, but nevertheless have a great effect on the patient's strength. From that degree of irritability of the nervous and vascular systems so peculiar to youth, arises a long train of troublesome symptoms, such as congestion of blood to the head, spasms, syncope, convulsions, &c.; the consequences of which are a weak state of health, which may continue for some time, or even last all her life; or a disposition to various nervous affections. To facilitate labour, and in some respects to prevent these unpleasant consequences, you may be of great service to your patient, provided you see her early enough. You should advise her to take plenty of exercise in the open air, but at the same time to avoid exhaustion, and to use a mild but nourishing diet; this, together with early rising, agreeable occupation, cheerfulness of mind, &c., are the chief means of bringing her to that state of health and strength best fitted to pass through labour with safety. The valuable directions of Mr Charles White of Manchester, to which I referred when speaking of the prophylactic treatment in abortion, as respects the use of the cold bath, shower-bath, &c., are very applicable here, and well worth your attentive perusal.

In advanced age, as for instance in women turned of forty, especially when pregnant for the first time, the structure, particularly of the parts of generation, becomes harder, firmer, and more difficult of dilatation, and loses the elasticity so peculiar to youth; the susceptibility of the nerves decreases, the irritability is diminished, the vessels are more unyielding, the cellular tissue becomes harder and more compact, &c.; in short, the evening of life begins to manifest itself in every act; the pains are weak and inefficient, follow each other extremely slowly, and the course of the labour is very protracted. The cause here lies quite as much in the insufficiency of the pains as in the opposition which the slowly dilating os uteri, the distended vagina, and the unyielding os externum, present to the passage of the child. As respects prophylactic treatment, we may do much here by the frequent use of warm baths during the latter half of

pregnancy, a proper degree of exercise, &c.; we must, as it were, train our patient to that condition of health and strength which will enable her to undergo with a favourable result the exertion and fatigue which will be required of her. Shortly before and during labour, sitting over the steams of hot water, injections into the vagina of decoctum lini or thin gruel, rubbing in lard into the vagina and perinæum, circular friction of the abdomen, will all prove of service. But you must not suppose, gentlemen, that all women who are pregnant for the first time, and advanced in life, bear children with such difficulty, for I have had many cases where the labour has passed over as rapidly as in a younger woman; nevertheless, under such circumstances you should always be upon your guard.

The *difficult separation and expulsion of the placenta* from insufficiency of the powers destined for that purpose may be produced in the same manner as the cases already treated of in this division of dystocia. The cause of irregularity in this case lies either in a functional or mechanical want of relation between the different parts of the uterus; for instance, injury or defective structure of the uterus: in the former it will consist in weakness, or in unequal or perverted contractions of the uterus.

Besides the causes which have been already mentioned as producing an insufficient degree of uterine activity, difficult separation and expulsion of the placenta may be produced by causes connected with labour itself, as, for instance, premature and immoderate straining during the pains, misuse of medicine given to increase the pains, too long duration of labour, or its following too rapid a course, faulty position of the child, misproportion between the child and pelvis, delayed assistance; rough manual and instrumental operations act in an injurious manner to the uterus both functionally and mechanically, they weaken its power of contraction, and render it unable to detach and expel the placenta.

Not unfrequently we find that the same woman has to struggle with protracted delivery of the placenta in every labour, without being able to assign a reason. We sometimes observe this circumstance to be hereditary in families where, for instance, the daughters like their mother are all subject in their labour to the same want of uterine activity. The various causes which influence the progress of labour will generally give us a previous idea of this state.

During pregnancy the fundus uteri dilates more in proportion than the other parts of the womb; it contracts proportionally as it expels the fœtus; hence, if the placenta be attached to the fundus uteri it is very quickly thrown off, much sooner than when attached to the sides. If, however, part be attached to the fundus, and part to a lateral portion, that piece of the placenta which is attached to the fundus is separated from the uterus before the other is;—the result of this is hæmorrhage.

“Women,” says Leroux, “who have wide pelves and a soft os uteri are liable to have precipitate labours, and these are generally followed by inertia. The uterus being too suddenly emptied of its contents has not had time to contract and give its parietes sufficient firmness by alternate and repeated contractions—the vessels have not been able to expel their contents to permit the fleshy fibres to act properly.”

The symptoms of retention of the placenta are non-appearance of the pains which return after the birth of the child. We do not feel above the pubes the firm hard globe of the uterus, as is the case when it has contracted sufficiently powerfully; the uterus appears larger, is soft to the feel, and sometimes on the fundus or anterior surface has distinct depressions; the umbilical cord does not follow when we pull it; on internal examination we cannot feel the inverted placenta presenting at the os uteri, or perhaps we can only reach its edge; the blood does not come in lumps or coagula accompanied with the peculiar feeling of grinding which characterises the after-birth pains, but it streams and trickles out more equally in a continued stream, without the sense of pain which I have just described; but if the placenta be attached with its whole circumference to the uterus, no hæmorrhage will occur, the danger, under these circumstances, will chiefly depend on the hæmorrhage which appears during or after this period of labour: the more profuse the hæmorrhage is, the more regularly it continues, and the greater the atony of the uterus the greater will be the danger.

“The retention of the placenta from irregular contraction of the uterus,” as Carus observes, “is by no means dangerous where there is no hæmorrhage; all mechanical irritation of the os uteri and pulling of the cord must be avoided, the patient must be put in the most comfortable posture, and take a cup of tea or infusum chamom. with a few drops of laudanum, essence of castor, or some Dover’s powder: a gentle perspiration follows, which relaxes the spasm, and the placenta comes away with ease in four, six, or ten hours.”

Besides the difficulty of ascertaining the quantity of blood which has been lost, it requires great experience to estimate the degree of present danger, and demands immediate attention to the peculiar constitution of the patient. During the continuance of the hæmorrhage, or by the repetition of the paroxysms, certain alterations, highly important, are taking place; there is much less blood circulating than formerly, and what blood there is becomes much less stimulating in its properties, and less capable of affording the due supply of energy to the brain and nervous system; the consequence of this is, that all the actions of the system must be performed more languidly, and with less strength, the body is much more irritable

than formerly, and slight impressions produce greater effects. This gives rise to many hysterical and sometimes even to convulsive affections; the stomach cannot so readily digest its food, the intestines become more sluggish, and the heart beats more feebly, the arteries act with little force, the muscular fibre contracts weakly, the whole system descends in the scale of action, and must (if the expression be allowable) move in an inferior sphere. In this state very slight additional injury will sink the system irreparably, very trifling causes will unhinge its actions and render them irregular; if the debility be carried to a degree further, no care can recruit the system, no means can renew the vigour of the uterus; we may stop the hæmorrhage, but recovery will not take place. If, when the system is debilitated by hæmorrhage, some irritation be conjoined, then the vascular system becomes more or less irregular, and an approximation is made to a state of fever, the pulse is feeble but sharp, the skin rather warm, and the tongue more or less parched; this state is dangerous, both as it exhausts still more a system very feeble, and also as it tends to renew the hæmorrhage*.

If the blood be poured into the cavity of the uterus, and cannot escape on account of the close contraction of the os uteri, or from firmly coagulated clots of blood, or the placenta which lies in the uterus and distends it, it is called *internal uterine hæmorrhage*, which is naturally much more dangerous than external hæmorrhage. As it is of the utmost consequence that you should be thoroughly acquainted with the symptoms of internal uterine hæmorrhage, which is so insidious in its attacks, I will fancy myself at the bedside of a patient, and endeavour to enumerate to you the symptoms in the order in which they commonly make their appearance. As one of your first acts after the birth of child will be to ascertain if the uterus be contracted, you will be unable in the present case to feel the hard firm ball above the pubes, which the fundus forms when properly contracted; the abdomen is soft, and gradually swells, there is a sensation of agreeable warmth in it, which I scarcely need tell you is from the blood pouring into the cavity of the uterus; the pulse becomes quick and small, the face pale, and the lips colourless; there is a sensation of oppression and sickness, accompanied with great weakness; she complains of want of air, breathes with a deep sigh, and yawns every now and then; she remarks that she has ringing in the ears, sparks before her eyes, with a sense of darkness; the skin is moist and clammy, and sometimes the perspiration stands in large drops upon the face and forehead, there is great restlessness, the extremities become cold, the breathing deep and anxious, the eyes glassy, strabismus, convulsions and death close the scene.

The whizzing boiling noise in the ears is a very frequent symptom, and has more than once apprised me of the mischief which was going on; thus I have occasionally heard the patient in a faint voice beg the nurse to take the kettle off the fire, as it was boiling over, although in reality this was not the case; I have heard a patient complain that somebody had shut the shutters or taken away the candle, for it was so dark that she could not see. These are some of the first effects produced by a diminished circulation in the brain, and are not to be disregarded. You will be sure to find the uterus soft and swollen, in the cavity of which the blood is rapidly collecting, although perhaps not a drop has issued externally, and the abdomen may thus gradually become as large as it was before labour.

These cases I own, gentlemen, are *very* frightful, for under no circumstances does the medical man come to grapple so completely hand to hand with death as here. I know of nothing so trying to the mind of a practitioner as that awful silence which reigns around the bed of a lying-in woman during a profuse uterine hæmorrhage; every face is directed towards him with the most fearful anxiety, not a sound is to be heard but the low labouring respiration of your patient, and that horrible pit pat, pit pat of the blood as it drops from the bed upon the floor. Oh, gentlemen, this is a sound sufficient to rouse up all your energies both of mind and body, and excite you to use every exertion to save the life which is flooding so fast away. Uterine hæmorrhage, however, has one fortunate peculiarity about it, viz. that the old proverb of "dum vita spes" is here applicable in a remarkable degree; uterine hæmorrhage and diseases of children have this peculiarity in common, and whilst there is a spark of life left we must not despair. I have known a patient who for twenty-four hours after labour could not see me when I came to her bedside, the eyes had a glazed dazzled appearance, with strabismus, and plenty of other alarming symptoms. I have known cases where for sixteen, aye even for eighteen, hours, there was not a trace of pulse to be felt at the wrist, where she lay in bed supine, motionless, collapsed, the extremities cold, the face pale—no, not pale, but yellow like a corpse, and yet with due care and attention they have come round at last and recovered. Above all, gentlemen, let me entreat you in such cases never to lose your courage, never to despair, and say "it is of no use," "it is too late," &c., for when once that feeling gets hold of you, it acts like a panic, it palsies all your presence of mind and power of thought, and renders you quite incapable of acting and doing your duty.

In cases of inactivity, or atony of the uterus, where no blood flows away, and where there are no signs of internal hæmorrhage, we should be cautious against being unseasonably and unnecessarily officious, for this may easily

* Burns on Hæmorrhage.

produce most dangerous consequences. We must give the uterus time to collect its strength, and put the patient into a convenient horizontal posture, but she must not be quitted for a moment. This quiescent, soft, and relaxed state of the uterus after the birth of the child may occur in cases where it has been much distended from the quantity of liquor amnii or by the presence of twins, or where its strength has been exhausted by previous long and difficult labour. It occurs in women of a phlegmatic temperament and lax fibre, who during pregnancy have suffered much ill health, by which the tone of the solids has been weakened, women who have large pelves and a soft dilatable os uteri.

As long as the placenta continues with its whole extent attached to the uterus, there can be no hæmorrhage, hence the old method of extracting the placenta immediately after the birth of the child, whether detached or not, is much to be deprecated. Cases are on record, especially the celebrated one of Carl Caspar Siebold, where fourteen days actually elapsed before the placenta was separated; a similar case is recorded by Dr. Denman, where it was fifteen days, and it then appeared as if quite fresh separated. But we may let things go on too far, and Professor Nægele says that, where the placenta has remained in the uterus for three hours after the birth of the child, the woman has just as good a chance of dying as of living. But if the uterus remain soft and uncontracted, and a hæmorrhage appear, it is a proof that the placenta is partially or wholly separated, and we must, therefore, try to increase the contractile power of the uterus. For this purpose we may use circular friction on the abdomen over the fundus uteri, sprinkling cold water upon the abdomen, or suddenly flapping a cold wet cloth upon it; after this we should dry the skin with a warm cloth, so as to make the shock still greater, and then repeat it.

When the discharge is very great, it requires the most immediate assistance; "in this case," says Chapman, "I lay the patient very cool, almost naked, and cover her body with cloths dipped in water, or vinegar and water mixed; this must be done when the flux is extremely violent, and without which the woman's life would be lost in a few minutes." It is not, however, the intensity of cold to be applied which is your object, but rather the suddenness of the shock which it produces, and thus we find that a slight degree of cold *suddenly* applied, will have a much more powerful effect upon the uterus than a much greater degree applied *gradually*. The old housewife's remedy of putting the doorway down the back to stop epistaxis must be familiar to you, and acts precisely on this principle; hence in severe cases letting a stream of cold water fall from a height upon the abdomen, will produce an instantaneous effect where even the application of ice before had been unsuccessful. Only a week or two

ago, I had a case of obstinate atony of the uterus after turning on account of placenta prævia; the patient had lost a frightful quantity of blood, and nothing seemed to have any effect in making the uterus contract until the midwife stood over her with a large teapotful of cold water, which she held as high as she could, and allowed the stream to fall upon the abdomen with considerable force.

In some of my midwifery hospital reports published in the *Medical Gazette*, you will see I have mentioned a very remarkable instance which occurred to the late Dr. Gooch, and which shows in a very striking manner that it is the shock, and not the intensity of cold, which stimulates the uterus to contraction. He received a most urgent summons from a practitioner to a lady who was just delivered; there had been a profuse hæmorrhage, which still continued in spite of all his attempts to make the uterus contract; she was pale and death-like, the abdomen had been covered with pounded ice, but still the hæmorrhage continued. Dr. Gooch instantly comprehended the nature of the case; he swept off the ice with his hand, and, seizing an ewer of water from the washing table, stood upon the bed, and, holding it as high as he could reach, emptied it upon her abdomen. Now this water, from being at the same temperature as the air of the room, was many degrees warmer than the ice, but yet it produced such a shock as instantly to excite uterine contractions which stopped the hæmorrhage. Much upon the same principle a friend of mine in large practice used what you will think was a strange remedy for want of a better. A sudden hæmorrhage came on, and in spite of friction, &c., became alarmingly profuse; the nurse was out of the room, and there was no water at hand, he looked round almost in despair, and seeing a lemon on the dressing table cut it in halves, and, introducing his hand with one of them into the uterus, squeezed the juice out and the uterus instantly contracted. Thus you will find that in very obstinate cases of uterine hæmorrhage a powerful effect is produced upon the uterus by giving the patient a draught of cold water, or, still more strikingly, by throwing cold water up the vagina. Where the atony is very great you may add vinegar with advantage, and in extreme cases Professor Nægele has advised an injection of equal parts of cold water, vinegar, and spirit. Galen is almost the only one of the ancients who recommended injections into the uterus to stop hæmorrhage; he gives a case where the patient had flooded for four days, and which resisted every other method. Prosper Alpinus, Professor at Padua, did the same in the case of his own wife by means of a catheter. Since that time we find it recommended by Guillemeau and Mauriceau, but they speak of it merely as a means known to Galen, and do not seem to have put it in practice themselves. To the English is due the merit of having first used this means in the

profuse hæmorrhage which succeeds labour. "Some practitioners," says Smellie, "inject proof spirits warmed, or, soaking them up in a rag or sponge, introduce and squeeze them into the uterus in order to constrict the vessels." "Cold injections," says Dr. Young, "should be thrown into the uterus, and repeated ten or twelve times, as on this the success depends."

Of the internal remedies, according to the best experience upon the subject, the ergot of rye and the tinct. cinnamomi deserve a decided preference before all. The mode of exhibiting these medicines I have already described to you. We occasionally observe that these excite vomiting in profuse hæmorrhages, and are brought up again instantly; this is what we should scarcely expect, especially with so powerful a carminative as cinnamon; but it seems to result from the irritability of the stomach being too suddenly excited. Oil of cinnamon was noticed in England by Chapman, in 1735, as being one of the best medicines that can be given where the pains are weak. The celebrated Dillenius recommended an injection of alum and kino, and in very bad cases he gave ten or fifteen drops of a mixture composed of ten drops of ol. menthæ pip. in $\frac{3}{4}$ of æther sulphuricus. Opium has been highly extolled by many authors on midwifery as a remedy for stopping hæmorrhage; but I am at a loss to know upon what grounds it is indicated. Our object is to procure uterine contraction, and surely opium is not the remedy to produce such an effect. I am convinced that in many instances much harm has been done by this practice, in cases of premature expulsion, or in placenta prævia; where our object is to have no pains, and where the hæmorrhage depends upon them, opium is doubtless an invaluable remedy; but, as Dr. Campbell rightly observes, "where our object is to excite the womb to action, its exhibition is obviously preposterous."

But I find, gentlemen, that I have unconsciously entered upon the subject of hæmorrhage after labour, before finishing the management of a case where the placenta is but partially detached. If the hæmorrhage continue in spite of all your attempts to stop it, what are you to do? Many authors say that it is *not* the half-detached placenta which is the cause of it, but the atony of the uterus, and that, therefore, the placenta should not be separated, for by doing so the bleeding surface is rendered greater, and the hæmorrhage thereby increased. Experience, however, has taught that, if hæmorrhage continue after a certain time, the only means of saving the patient is by introducing the hand, and bringing away the placenta. The presence of the placenta tends to prevent the weak and exhausted uterus from contracting, which it otherwise would do, and the artificial separation of the placenta is of itself an excitement. In such cases I have always made a point of bringing away the placenta, and this has been followed immediately by a cessation of the hæmorrhage.

"I have always found," says W. J. Schmitt, of Vienna, "and this is the result of my whole practice, that in dangerous uterine hæmorrhage after delivery, which was not to be suppressed by the usual means, the extraction of the placenta was perfectly necessary, and the only means of saving the patient, and that the longer this was delayed, the greater the danger." Injections into the uterus before delivery of the secundines are of little service, since but a small portion of the fluid can come into contact with the uterus itself, on account of the membranes; but when once the membranes are brought away, they will then have a powerful effect. If, after the expulsion of the placenta, little or no blood appears externally, but the uterus is soft and begins to swell, you may be certain that internal uterine hæmorrhage is going on, and this insidious foe must be carefully watched. Besides the remedies which I have already enumerated to you, firm pressure on the abdomen is of much service in preventing a further accumulation of blood in the cavity of the uterus, and thus gives you more time to put in force such treatment as will induce contraction. Jogging the uterus smartly every now and then with the points of the fingers acts as a considerable stimulus, and frequently dislodges the coagula which are accumulating in its cavity. But I cannot sanction the violent friction, or rather scrubbing of the abdomen, for I can call it nothing else, which I have occasionally seen practised by accoucheurs, nor do I recommend you to gripe the uterus as has been advised; recollect that, although you may save the patient from hæmorrhage, there are other equally serious dangers to be encountered during the puerperal state, by no means the least of which is inflammation. Where the uterus has expanded considerably, I consider it absolutely necessary to remove the coagula on the same principle as I advised you to remove the placenta, and you seldom require to do this twice: generally speaking, as soon as your hand passes the os uteri, you will feel the coagula forced down along your arm by the contractions of the uterus. In some cases, a slight trickling will still continue, although the uterus be tolerably hard and small. On examination here you will mostly find a long coagulum projecting through the os uteri, on the removal of which the hæmorrhage ceases. In all dangerous cases of hæmorrhage from inertia or atony of the uterus, recollect that time is of great importance. If you merely succeed in keeping the hæmorrhage under by the constant application of the remedies above described, even if the uterus relaxes and the hæmorrhage returns the instant you cease to employ them, still you are gaining ground, you are giving the exhausted uterus time to recover itself and collect its energies; and in by far the majority of these severe cases you will find, in the course of half an hour, the state of contraction thus artificially kept up become gradually more and more permanent. Besides the remedies already

treated of, application of the child to the breast is a most powerful means of exciting uterine contraction. I have never seen it fail where the mother was sufficiently conscious to know that it was her own child; it results from that sympathy which exists between the uterus and mamma, and which I spoke of at the beginning of the course when on the subject of amenorrhœa. It is a beautiful and striking evidence of design, in thus providing the mother with the most powerful, and at the same time natural, means for ensuring that state of uterine contraction which is so necessary for her safety.

Review.

The Clinique Médicale; or Reports of Medical Cases. By G. ANDRAL, Professor to the Faculty of Medicine of Paris, Member of the Royal Academy of Medicine, &c., &c. Condensed and translated, with Observations extracted from the Writings of the most distinguished Medical Authors. By D. SPILLAN, M.D., Fellow of the King and Queen's College of Physicians in Ireland, Member of the Association of the Fellows and Licentiates of the College of Physicians, and formerly Physician to the Dublin General Dispensary. London: Henry Renshaw.

(Second Notice.)

IN advertng to Dr. Spillan's translation of "Andral's Clinique Médicale" in our last number we made few observations on its merits; we felt more anxious that the readers alone should judge for themselves; it was therefore that we presented the extracts that they might carry their own weight—might convince with more potency than any eulogia of ours the value of the work. "No argument like matter of fact is," said the witty Butler: in this case we appreciated justly, we doubt not, the merit of the maxim. Theories of disease have been propounded,—doctrines have been borne upon the wings of imagination,—and conclusions have preceded facts, in such wild confusion, that the mind has really become bewildered often in its own perplexities. We want facts, is the common outcry, we do not want hypotheses; we want demonstrative proofs that certain doctrines are correct;—let us see what are your premises that we ourselves may draw the inferences, is the common declamation.

Experience is our guide; and though the results of any man—of Andral, or an equally experienced and celebrated physician, may differ from ours, we will accede to his positions provided he presents us with tangible proofs. This is all we ask for. These are our sentiments, and they are no doubt the sentiments of nine-tenths of the profession.

We have in the present work an illustration of the various forms of internal disease—of manifold phenomena—anomalous symptoms; yet each and all explained on the accredited principles of physiology. Why is there pain

in a part remote from the seat of diseased action? Wherefore does it arise? How is it to be accounted for? questions, it is admitted, involved in obscurity—questions which may be answered, however, satisfactorily to the minds of the present generation, yet may be laughed at by the casuist, and exploded by hereafter pathologists. We expect too much; we talk of man's perfection; we believe ourselves to be what we are not—wise men, or fools: we know we are neither. But to the work before us. There never, perhaps, was one which deserved greater credit as a production intended to elucidate the nature of disease by contrasting external signs with autopsic appearances. It is an excellent exemplification of demonstrative science and of the system of Bacon—*inductive philosophy*.

Isolated portions of a work sometimes afford no index whatever to the value of the whole. Sometimes, however, a few quotations from its more prominent parts evince, in a very general, nay often in a graphic manner, the tenor of its contents. It is for the latter reason we give such copious extracts. We shall, nevertheless, as we have previously noticed the work, give but one concluding extract from the present part. After enumerating a number of cases of disease—cases which are met with in the practice of every one, displaying anomalous and varied phenomena, we have the deductions, from encephalic disease witnessed, of course, on an extensive scale.

Remarks.—A considerable number of cases have been recorded relative to tumours of different kinds developed in the cerebellum and around it, and which, in either situation, must exercise an influence on the functions of this organ, whether it be irritated, compressed, or disorganised by them.

"We have found scattered, in different works, thirty-one cases of this kind. In all these cases, the tumours formed in the cerebellum or in its membranes, were sometimes cysts containing solid or liquid substances of different kinds, sometimes fibrous masses, sometimes tubercular or cancerous products.

"In the great majority of these cases, the intelligence was preserved intact during the entire course of the disease; only that frequently a few days before death a state of coma was observed, which sometimes might be accounted for by considerable injection of the entire encephalic mass, or by the presence of a great quantity of serum in the ventricles; sometimes no lesion was found which could account for it; in the latter case it is probable that a moment arrives, when, either by its greater development, or by the sole fact of its prolonged existence, the affection of the cerebellum will produce a reflected effect on the rest of the encephalon, and seriously disturbs its functions; for there is certainly a consent of action between all the parts of the encephalon, and one of them cannot be for any time altered without the others ultimately feeling it.

“Seven patients only, out of thirty-six, presented, long before death, a marked disturbance of the intelligence.

“One of these patients, a female, thirty-five years of age, was an idiot from birth. The right lobe of the cerebellum was compressed by a tumour which had its origin in the occipital fossa. It might be supposed that the idiocy was caused by the embarrassment of the cerebral circulation; but is it probable that this tumour existed from birth? Now, the absence of intelligence was dated from this period. It is not, then, probable that, in this case, the lesions found in the cranium were the cause of the idiocy.

“Another patient exhibited a loss, at first temporary, but afterwards permanent, of the memory of words. There was found in this individual an encephaloid tumour in the centre of the right lobe of the cerebellum, nearer the lower than the upper surface. A great quantity of serum also distended the lateral ventricles.

“In three other patients, a general weakness of intellect was noticed. In one of them the right lobe of the cerebellum was compressed by a tumour which belonged to the dura mater; some serum dilated the ventricles. In the second an encephaloid mass seized on the posterior and inferior part of the cerebellum, as well as the medulla oblongata. In the third, a tubercle of an inch and a half in diameter was developed on the upper surface of the cerebellum, in the median line.

“In a seventh patient, some delirium was observed. Did this delirium, which was of short duration, depend on the tubercles found in the left lobe of the cerebellum? Was it not rather the result of the injection which was detected in the pia mater of the base of the brain? Such are the only cases in which the intelligence presented any perceptible disturbance. The disturbances of motion are much more frequent.

“Out of our thirty-six cases, there are but eight in which motion was not in some way disturbed.

“Complete or incomplete paralysis was observed fifteen times.

“In this number there were but four who had hemiplegia; it took place on the side opposite to the lesion of the cerebellum in three cases, and in a fourth the two lobes were diseased.

“Paralysis was also observed four times. In these four cases the cerebellum was compressed or disorganised, either in its two lateral lobes at once, or in its middle lobe. In one of these cases the medulla oblongata participated in the alteration of the cerebellum. It is remarkable that in these four cases the paralysis particularly affected the lower extremities, whilst the upper extremities enjoyed all their freedom of motion, or else had undergone only a debility always less than the lower extremities.

“Two patients presented a paralysis, or at

least a considerable debility of the four extremities. In one of them, a tubercular mass, developed at the base of the cranium, compressed at once the cerebellum and spinal marrow; in others the two lateral lobes of the cerebellum contained tubercles, but they were twice as large in the right lobe as in the left; and the feebleness of the limbs was greater on the left than on the right; so that this case of general paralysis may again serve to prove the crossing influence of the lobes of the cerebellum.

“The paralysis of the face, which we met once in one of the cases belonging to ourselves, isolated from every other paralysis, was connected with the existence of two tuberculous masses; the one developed on the left lobe of the cerebellum, and the other at the posterior surface of the spinal marrow.

“There remain four patients, of whom nothing else is said with respect to motion except that *they gradually become debilitated.*

“Involuntary contractions affecting a greater or less number of muscles were observed more frequently than paralysis; we met twenty-two cases in which these contractions were found to exist. In fifteen of these twenty-two cases the entire body was agitated at intervals by convulsive movements, which became more and more frequent, and it was often in the midst of violent convulsions that the individuals died. Some, and that was the greatest number, retained their consciousness during the continuance of their convulsions; others lost it suddenly, and they presented the symptoms which characterise an attack of epilepsy. In these patients the lesion occupied different seats, sometimes confined to a single lobe of the cerebellum, sometimes extending to the two, sometimes occupying also the medulla oblongata.

“The movements of the tongue were embarrassed in only two cases, and in both it results from the seat of the lesion, that the nerve of the ninth pair must be compressed or disorganised by the tumour pressing on the cerebellum.

“In the thirty-six cases which form the subject of our analysis, the sensibility presented disturbances not less varied than the power of motion.

“The general sensibility presented no disturbance in the greater number of the cases: sometimes, however, it exhibited a remarkable exaltation, whilst at other times it was completely abolished.

“Not merely the general sensibility has been modified in some of our thirty-six patients; occasionally, also, the organs of the particular senses have been found affected; thus, in one case, deafness was observed; and in six vision was either completely destroyed, or very much weakened.

“Among the organs of the life of nutrition, the stomach is the only one which presented a phenomenon deserving of particular notice, with respect to its frequent reproduction;—

this phenomenon is vomiting: it was observed twelve times in thirty-six cases.

"If you now consider these twelve cases with respect to the nature and seat of the affection of the cerebellum, you will find nothing different from what was to be seen in the twenty-four other cases, where there was neither vomiting nor nausea. *A priori*, we should not expect to find this peculiarity of either seat or lesion; for in all this volume, in connexion with lesions the most different, as well those of the meninges as those of the nervous pulp itself, we have seen vomiting show itself as a common effect of a crowd of affections of the encephalon. Can it be said that when it is produced, the brain is in the same condition as when it does not occur? Certainly not, for a different effect cannot be comprehended but with respect to a different cause; but these conditions we know not; they escape us just as those interior changes of organisation have been removed hitherto from our researches, which changes, coming to be connected with identical lesions, render their effects so variable. Certainly, the inconstancy of the effects here can only be owing to the variety of causes. To ascertain those causes, it would be necessary to interrogate each cerebral fibre, first considered separately, and then traced in its connexions with other fibres. It is in this double point of view, that we think the pathology, as well as the physiology, of the brain should be studied. It is, on the one hand, a great whole, composed of a number of parts, each of which performs a special act; but, on the other hand, these different parts are intimately connected with each other, so that they are mutually bound together. Hence it follows, that in the point where a lesion is discovered, the direct cause of the effects which it produces does not always reside, and according as it re-acts on such or such other points especially destined for the performance of a certain act, it is this which will be found modified. If then it happened that we succeeded in discovering in the encephalon a certain number of parts, the lesions of which always occasioned the disturbance of the same cerebral act, it would not, in our opinion, be fair to object to the doctrine of localisation, that there are also other cases where this same functional disturbance is reproduced, though the lesion might be elsewhere.

"Among the thirty-six cases constituting the subject of our analysis, only in three was any thing particular noticed with respect to the genital apparatus. In one of these cases permanent erection of the penis was observed during the whole time the patient was attended. There was, in this case, compression made at one and the same time by a tuberculous mass, both on the right lobe of the cerebellum, and on the medulla oblongata. In the second case, the patient indulged in masturbation; several tubercles were found in the upper part of the cerebellum; whether on both sides, or on one only, we are not told. Lastly, in the third

case, regarding an individual said to be very prone to venereal desires, a tubercular mass occupied all the substance of the middle lobe."

After the extracts we have given from this first part, and after they have been carefully perused, we augur an extensive sale of Andral's Clinique Medicale in the English version. It is a glorious evincement of what a powerful mind can achieve when imbued with all the elements of science and learning of the period.

REVIEW OF FOREIGN MEDICAL LITERATURE.

FRENCH MEDICAL AND SURGICAL CLINICS.

CLINIC OF M. VELPEAU.

Elephantiasis of the Scrotum—Operation.

A YOUNG man of good constitution, although lymphatic, entered the hospital for the cure of an enormous development of the scrotum and penis. We give the dimensions of the tumour, less as absolute than as relative measure, as it has been considerably exceeded in several cases of the kind, especially in the memoir published by MM. Gaëtani and Pruner.

Sixteen inches from one side of the root of the penis to the other, passing under the scrotum; 19½ inches from the point of the penis to the perinæum, parallel to the raphe; fourteen inches from one side of the ramus of the ischium to that of the opposite ramus; the middle circumference of the penis, in its natural state six inches in length, including the prepuce of an inch and a half nearly, four inches.

From the young man's account of himself it appeared that he had never been ill until 1831, when he received a kick in the scrotum, two months after which he found the disease commence. Hydrocele supervened, and on puncture a great quantity of liquid issued. After this operation he recovered tolerably well. Several months afterwards, and without any appreciable cause, a uniform swelling of the scrotum appeared, which soon extended to the penis, but without redness or pain. It however also appeared that long before he received the kick the testicles were already very much thickened. He had used a truss, and had tried to no purpose a variety of medications both internally and locally.

Three months subsequently, M. Boileau, a surgeon of Nancy, had recourse to this operation:—From the upper nearly to the lower part of the scrotum, two incisions were made parallel to each other and distant about four inches. These incisions were united inferiorly by a horizontal incision, so as to form a quadrilateral flap. This flap comprised all the tissues as far as the tunica vaginalis: this was raised, and from the wound issued a sort of gelatine, somewhat analogous to the white of an egg or the vitreous humour of the eye; a part of the infiltrated cellular tissue was at the same time taken away. The scrotum soon

sunk to nearly its ordinary size, and the cicatrization was quickly after completely effected. In the course of a few months it again enlarged, and at length reached the measurements above specified, at which it had remained with little variation for two years when he entered La Charité.

The present state of the affected region is as follows:—Above the folds of the groin a considerable tumefaction in the direction of each spermatic cord; testicles scarcely to be felt; the raphe very strongly pronounced, like a cord of two or three lines' diameter; on the inferior surface of the penis a sharp-edged raphe, affecting the superior part considerably by changing the direction of the prepuce; the cicatrices of the scrotum very white, and the surrounding skin healthy, especially on the sides.

It is remarkable that since the supervention of elephantiasis the scrotum is often erysipelated, more frequently in winter than in summer; some days ago one of these erysipelata spread itself to the penis, the hypogastric region, and to the thighs, each being followed by an augmentation of the tumour.

A degeneration of the skin and subcutaneous tissue, not in every part of the same character, here exists, observed M. Velpeau; before and behind the tumour, species of tubercles and of rugosities may be felt; in a word, we have here a malady and not a simple hypertrophy of the epidermis. On the sides and above the skin is almost in its natural state; that of the penis is only tumefied, which is of great import, as, after the operation, a methodic compression on that member will probably bring it back to its normal state.

The first operation having yielded gelatinous matter, I do not think that the malady is seated in the skin only; the same will doubtless issue this time, and must come from the tunics which cover the testicle less than from the tunica vaginalis and the interposed cellular tissue. Nor do I agree with Alard*, that this malady is attributable to chronic inflammation of the lymphatics, but rather believe it arises from extreme rarefaction of the epidermis and subjacent tissue.

The professor then proceeds to the examination of the causes of this malady, and, with M. Chervin, rejects, not exclusively, the greater part of those adopted by MM. Gaëtani and Pruner, such as the humidity produced by the effects of the sun and the atmosphere, the herbaceous aliments used in Lower Egypt, where the complaint has hitherto been most frequently found, the loose texture of the scrotum, and the use of large pantaloons, general among the Egyptians. The causes of it, he observes, are not yet known, and all that has hitherto been said about them is too general and vague to merit any fixed

attention, nor can anything determinate be advanced as to its extension and bulk. Dionis reports that, in India, Father Mazeret saw one of sixty pounds' weight; MM. Gaëtani and Clot Bey have operated on cases weighing one hundred and ten and one hundred and twenty pounds; M. Chervin, at St. Christopher's, saw one of one hundred and sixty-five pounds' magnitude; and, finally, that on which Delpech operated weighed sixty pounds.

But this malady is not less frequent in women than in men, and found in different parts. Thus M. Monod excised one of six pounds from a young female of nineteen; it was situated on the right labia majora; and from the patient in ward No. 1 the professor successfully excised one developed between the posterior part of the vulva and the coccyx, and has had occasion to observe many others in the labia majora. The fact published by M. Dalrigh is well known.

The variety of topical remedies with which this malady is opposed frequently cause erysipelata. Compression is too difficult when the parts are soft and unequal, bandages insufficient, and mercurial frictions have always failed; internal medications have had no better success; and, as the patient himself desired it, M. Velpeau decided on performing the operation.

In this patient's case it was possible to remove almost all the affected parts, and to preserve a sufficient flap to re-cover the sound parts. Of the two modes of performing this operation, by removing or by preserving the testicles, the professor chose the latter, the former being attended with too much danger. Having then descanted on the various opinions of other operators in such cases, and on the unnecessarily protracted time which the operation has generally taken, he proceeded.

Two incisions, sufficiently regular, from the root of the penis bearing towards the middle of the perinæum, and describing on each side a convexity turned towards the raphe, isolated a middle portion of the degenerated tissue, which was dissected and totally removed in twelve minutes. In six minutes the testicles were denuded of their cellular coverings and gelatinous tissue.

Degeneration of the testicle, hernia, and hydrocele will complicate with elephantiasis of the scrotum; but here was nothing to fear but hydrocele; each vaginal tunic, in fact, contained half a glass of serosity; both were excised; five or six small arteries were tied, and several sutures were requisite to maintain the parts in proper apposition, so as to form a speedy reunion, with the exception of the posterior part of the wound, where an opening was left for the suppuration and the liquid of infiltration.

The penis, which was very much puffed, was then methodically compressed by means of a rolled bandage; and to further its compression a hollow cylinder was introduced within the prepuce, as in its actual state the

* History of the Elephantiasis of the Arabians, a particular Malady of the Lymphatic System, &c. 1809,

penis can make no resistance. The lips of the flap contained much serosity, and were thickened. On the sub-tegumentary surface of the part being removed there was an abundant quantity of gelatinous and lardaceous matter, and so complete was the degeneration, that no trace remained of the primitive appearance of the subcutaneous coverings, whether fibrous, cellulous, internal, or external. The weight of the removed part did not exceed four pounds.

We shall not fail to give the results of this fine operation.

MEDICAL CLINIC OF THE HÔTEL DIEU.
M. CHOMEL, PROFESSOR.

Organic Affection of the Heart—Œdema of the Lower Members—Chronic Pulmonary Catarrh—Death—Contraction of the Auriculo-Ventricular Orifice.

A woman, æt. 75, in the ward 16, St. Lazare, presented on her entrance into the hospital a purplish redness of the face, irregularity of pulse, and œdema of the lower members. These symptoms sufficed for suspicion of organic lesion of the heart, of which, however, it was difficult to determine the seat. Auscultation and percussion of the præcordial region gave but negative signs; no abnormal deadness; no *bruit de soufflet*; no impulsion. To these symptoms were added a cough of ancient date, with expectorations, mucous and opaque at first, but which afterwards became altogether purulent, and seemed to point to the existence of pulmonary phthisis, which, however, auscultation and percussion of the thorax did not confirm. Treatment purely palliative.

This patient, after some months of alternate remission and exacerbation of suffering, died.

On dissection it was found that the heart was not augmented in size, but united to the pericardium by ancient and solid adhesences; that the left ventricle was rather less than ordinary, the auricle on the same side of rather greater capacity than in the normal state, the internal surface entirely white, and the auriculo-ventricular orifice considerably contracted. Not one single tubercle was found on the lungs, though examined with the greatest care; but the mucus of the bronchiæ was throughout of a darkish red, and thickened, and the bronchial canals rather more dilated than in their normal state, without, however, offering those peculiar indications, such as are sometimes found, and which give rise to symptoms analogous to those observed in tuberculous excavations of the lungs.

Typhoidal Affection—Disappearance of General Symptoms—Persistence of Diarrhœa from Irregularity of Regimen—Sudden Coma—Right Hemiplegia—Death—Ramollissement of the Left Hemisphere.

A woman, æt. 33, presented on her first entrance into the hospital equivocal signs of

typhoidal affection; there was cephalalgia, fever, diarrhœa, and pains in the belly, but no appearance of typhoidal spots, no sudamina.

These symptoms continued for some days, at the end of which diarrhœa alone remained, and with intense obstinacy, attributable to frequent irregularities of regimen. Antiphlogistics, narcotics, and astringents were successively tried, and a blister applied to the abdomen—all in vain. Auscultation of the chest gave only a hissing râle.

In the beginning of April, the patient, after the ingestion of a quantity of food, was seized with violent dyspepsia, vomitings and a comatose state succeeded with paralysis of the members of the right side, and, three days subsequently, she died.

April 10th. Dissection of the body presented great pleuritic effusion; three or four ulcerations level with the glandulæ Peyeri, which left no doubt of the existence of typhoidal fever, suspected only during life; disseminated *ramollissement* of the left hemisphere; the meninges sound; circumvolutions flattened and strongly pressed against each other, offering a diminution of consistence of their surface; the corpora striata red and softened, *ramollissement* also of the base, but no change of colour; on raising the cerebral mass the base of the left side rent, the right remained whole.

Typhoidal Affection—Suckling an Infant during the first Twelve Days of the malady without prejudice whatsoever to its Health.

A woman, ætat. 31, delivered about six months, entered the hospital in April, having been ill for fifteen days, the first twelve of which she had suckled her infant, who continued in perfect health. She complained of pain in the belly, diarrhœa, intense cephalalgia, and prostration of strength. A similar case in the same ward occurred a short time before. A victim of typhoidal affection had also suckled her infant for the first twelve days of her malady without the slightest prejudice to its health.

The symptoms of the patient in question on her first entrance, left no doubt of the existence of typhoidal fever; lying on the back, face red, tongue dry; extreme weakness and inability to walk unsupported; dazzling of the eyes when standing; expectorated two or three times black blood in clots, evidently from the nasal fossæ; the belly painful, and sonorous on percussion; its anterior walls as well as the chest having several lenticular rosaceous spots from a line to a line and half diameter; pulse 130, and great heat in the skin.

Leeches had been applied before she entered the hospital. As the pulse offered a certain resistance, and the face was animated, M. Chomel prescribed a bleeding to the amount of six ounces only; copious bleeding in such cases being hurtful, frequently causing a prostration difficult to overcome, a

solution of the syrup of gooseberries; emollient cataplasms on the abdomen.

M. Chomel forbears as yet the employment of purgatives, opinions on their influence in such cases differing widely; nor will he have recourse to that medication until he has consulted all the documents collected by those physicians who have included it in their treatment.

Lead Colic—Employment of the same treatment as at Hôpital de la Charité.—Cure.

Two men attacked with the lead colic in different degrees of intensity, have lately presented themselves at the clinic.

The first, a young man about 28, who had been employed for three months in a factory of white lead. On his first seizure with colic and constipation twenty-six days previously, he entered la Charité, where purgatives were administered to him, and he was able to return to his work in the factory at the expiration of three days. Soon, however, the same accidents recurred, and he came to the Hôtel Dieu.

On the first examination his countenance appeared natural; the pains in the belly not very acute, and diminished on pressure; pulse rather slow than accelerated, but for three days no evacuation had passed.

On the following day three grains of cassia with three quarters of an ounce of Glauber's salts was administered, and copious evacuations above and below ensued. At night one grain of opium procured him a profound sleep, and on the fourth day from his entrance he quitted the hospital perfectly recovered, and fully determined not to return to the fabrication of white lead. The case of this patient was remarkable for its benignity; not so with that of the other, a house painter, ætat. 36; it was his fifth attack of lead colic; he had been suffering eight days, but had ceased his occupation for three only; an application of leeches previously to his entrance had procured no relief.

When first examined, the countenance was haggard; sclerótica yellow; acute pains in the abdomen; occasional spasmodic contractions of the lower members, and permanent contraction of the annular and auricular fingers of the left hand, and of the annular and medial fingers of the right hand; bilious vomitings had continued for three days; pulse 75; obstinate constipation. Treatment, same purgative as the case above, and two grains of opium at night.

Vomitings ensued but no evacuation, and the relief was but momentary.

The following day pulse 108; a purgative lavement, but no evacuation. Powdered jalap, one drachm in three ounces on the third day; no effect.

Oil of ricinus was administered on the two following days in doses of two or three ounces, and at length the constipation ceased, and the patient recovered.

Reports of Societies.

LONDON MEDICAL SOCIETY.

Monday, May 4th, 1835.

DR. WHITING, President, in the Chair.

AFTER the former debates had been confirmed, Dr. Johnson delivered to the Secretary a correct account of the post-mortem appearances of the patient whose case had caused an animated discussion the preceding evening; and as some of the professional gentlemen who had been consulted were Fellows of the Society, they came prepared to maintain the opinions each party had formed at the consultations. Not having been present at the former meeting prevents our giving the debates; but we learnt that death was regarded by some as caused by an affection of the heart, which was found enlarged at the post-mortem, or by gastro-enteritis; but here the change was considered by the Examiner, who forwarded the account to Dr. Johnson, as the result of what had taken place after death, and, again, others by disease of the kidneys.

Dr. Johnson argued this evening, that the condition of the tongue alone was sufficient evidence to prove that death was not occasioned by the two first; and he would beg leave to ask, whether the doctrine of Broussais would admit of a white tongue, in gastro-enteritis? but rather a tongue with redness at the tip and edges, or with two lines of red down the centre? or, again, in the wasting disease of phthisis, was it blanched? Certainly not; and this he might be allowed to infer from similar cases that had lately fallen under his observation, where the albuminous deposition in the urine formed the principal phenomenon of the existence of the disease in the kidney, and proved rapidly fatal. But still he did not wish it to be understood, that if albumen was present in the urine it always indicated organic change of structure in the kidney and death would necessarily follow, for many persons are cured of dropsy, and restored to perfect health, who had albuminous urine, or at least we may infer so, as they have not suffered from the complaint afterwards; and if the kidneys had been diseased, we are not justified in concluding that recovery would have ensued. The Doctor hoped that the gentleman who had impugned Dr. Hodgkin's character of a most illiberal and unwarrantable nature would be induced to withdraw it, as he could not for a moment suspect that any gentleman in the pursuit of inquiry for the benefit of his profession would state to exist that which did not, however erroneously he might have formed his opinion in consequence.

Dr. Shearman trusted that the member or visiter who had thus been accused, would come forward and vindicate himself. (Here Dr. Johnson named the gentleman, who unfortunately was absent, as he found that Dr. S. was

ignorant of the member alluded to, and which he would have done before without hesitation, had he not considered every one then and now present was fully conscious who the author was, as he (Dr. J.) had cried at the time it was uttered *hear, hear*. Dr. Shearman explained, that he was led to call upon the gentleman to come forward, not that he expected any one would, as he thought himself the offender, for the accuser had made use of the same expression that he himself had at the former meeting, but it was only in that light that we speak of Mr. Abernethy or of Dr. Currie, the former who viewed every disease as seated in the digestive organs, and the latter in the liver.

The president considered it would be consulting the interests of the Society to let the subject drop, as he strongly believed that it had fallen from the speaker inadvertently in the warmth of argument and support of his own views, without the least intending to impeach Dr. Hodgkin's character, and therefore begged that if any friend of Dr. H's was in the room, this sense of the meeting would be conveyed to him, especially as Dr. Johnson felt that it was no more than his duty to request the favour, as the impugnation had not only reached Dr. H., but had been complained of by him*.

Mr. Dendy contended that he regarded the presence of albumen in urine as a symptom of general debility, he having had a case under his care of a lady seven months advanced in pregnancy, where he was apprehensive that abortion might follow. Having fortunately removed the most urgent symptoms, he recommended exercise in the open air, and the albuminous deposit disappeared, although the crust formed on the urinal was nearly an inch in thickness, separated spontaneously, and was not the least ropy.

Dr. Shearman requested to know the appearance of the deposit, as he looked upon it as mucus and not albumen.

Mr. Dendy answered, that he was perfectly satisfied as to the nature of the deposit, not having contented himself solely with its appearance, nor had the proper test been disregarded; and it was found to bear an exact resemblance to the albumen of an egg, naturally semi-opaque, but if heated became opaque: in fact, he regarded it as equally pure as the specimens that had been sent round in the bottles at their last meeting, and which were now on the mantel-piece of the room.

Mr. Bryant coincided with Dr. Shearman and thought that his friend had entirely forgotten that albumen was soluble in the menstruum. He supposed he had found it, and in order to become certain of its presence in that fluid, it was necessary to have recourse to the aid of heat or of an acid.

Mr. Dendy readily replied, and asked Mr. Bryant, were not acids generated in the human body in a state of disease? and was he prepared to prove that they had not the same power of exerting the same influence, whether produced in or out of the body?

Mr. Field believed that the mind, when under a state of excitement, exercised powerful influence over the functions of the kidneys, causing them to set up an increased action; and if the state of the mind were not relieved, death would ensue.

Mr. Kingdon coincided with the last speaker, and said that if the cause producing the over-excitement was not quickly arrested, or the patient was not able to speedily get through the cause giving rise to the disturbance, he must die from the immoderate increase of urine that always supervened.

Mr. Clifton regretted that it was not in his power to add much information to what had already been offered; but still he thought that the stomach, when out of order, especially in children, was the chief cause of the urinary organs becoming deranged, and he therefore invariably directed his attention to the correction of that viscus, and the alteration in the urine speedily ceased or disappeared.

Mr. Headland reminded the members of the cases some time back related to the Society by Dr. Whiting, when he satisfactorily proved the baneful influence of mercury on the kidneys. The same gentleman likened the kidneys to a machine, which has no power either in deteriorating or improving the fluid that is brought to it; *ergo*, if impure blood comes into it, unhealthy urine is the result, and *vice versa*.

Dr. Shearman, with most of the other speakers, objected to the restrictive power of the functions of the kidneys. He (Dr. S.) also felt anxious to adopt the term fermentation for secretion, as proposed long since, and unjustly ridiculed by the profession.

The President, in rising to the adjourning meeting, briefly alluded to the depressing effects of mercury on the constitution, and the appearance of albumen in the urine, the effects very frequently of debility; and offered some remarks on diabetes, inculcating the absolute necessity of restricting patients, for its complete cure, solely to animal diet, which he had had ample cases to verify the necessity of, and also of the total seclusion from vegetables; and in a case that he had lately submitted to this treatment the cure was completed in a month, and he is certain, had he permitted the least quantity of vegetables, the cure would not only have been retarded, but probably frustrated.

[* We were disappointed to find that the members did not confine themselves strictly to the medical case before them, replete with interesting topics for discussion, but mostly contented themselves in refuting each others' hypotheses, which they easily admitted of, owing to their not being supported by conclusive deductions or facts, which induces us to confine our account of the debates which in part referred to it.—EDS.]

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 12th, 1835.

HENRY EARLE, Esq., F.R.S., President, in the Chair.

THIS evening a case of vesical vaginal fistula, successfully treated, was read, communicated to the Society by Sir Benjamin Collins Brodie, who had occasionally seen the patient with the author. The patient, 23 years of age, had been under the care of Dr. Henry Davis and other practitioners, and also an inmate of the Middlesex Hospital for six weeks, without procuring any relief from her wretched sufferings, which had been produced from difficult labour. When she consulted the author, he found the urethra impervious, and the vagina obliterated through adhesive inflammation. For the treatment the author had two indications in view, viz. first to restore the urethra to its normal condition, and, secondly, to cause an obliteration of the fistulous openings, which he proposed accomplishing by the use of the cauterly, and confining the patient to the position of lying on the face and abdomen; as scarifying the edges of the wound occasionally had been tried in conjunction with other means, without producing any beneficial results, the cauterly was first heated to redness, and then suffered to turn brown before applied, thereby vesicating, and not completely destroying the surfaces, when applied and raised to a white heat as practised and recommended by Dupuytren. The situation of the fistula was highly favourable to admit of an easy application of the cauterly, which occasionally forms along an insurmountable barrier to the successful cure of these distressing cases. This case, although briefly related, reflects the highest credit upon the persevering assiduity of the author, whose services were gratuitous, and the great forbearance of the patient, who was confined in bed in one position for twenty-two months, and frequently solicited a repetition of the use of the cauterly, which the author was compelled to have recourse to upwards of fifty different times to complete the cure.

After the Secretary, Mr. Partridge, had read the case, the President rose, and said, although it was his place to sit and hear any remarks that the members might do him the favour to offer; nevertheless, he was induced to act on this occasion contrary, and which he trusted the Society would excuse, hoping, as many present enjoyed great opportunities of arriving at the best means of treating it, they would offer the result of their individual experience, which alone prompted him thus to stand up, as the distressing affection was unfortunately considered an opprobrium of our art seldom susceptible of relief, much less of cure, from our assistance. Not wishing to detract from the merits of the case now before the Society, he

wished it to be understood, that the same happy result must not always be expected, should any be tempted to have recourse to the method therein most perseveringly followed, as the situation of the fistula would seldom be found so readily within the reach of the cauterly.

He (Mr. Earle) considered that the disease was not solely produced by the effects of the pressure of the child during delivery, but, in a very great majority of cases, from suffering the bladder to become over distended with urine, which occasions an altered position of the viscus; and then in attempting to withdraw the accumulation by the female instead of the male catheter an injury and a rupture to its coats is often and very easily effected.

Mr. Earle had found excising the fistula more successful with him than the cauterly, although from their situation it was generally attended with a great deal of inconvenience, fatigue, and distressing exhaustion, from being compelled to remain in one position a considerable length of time.

The instrument that he used was the bistoury, with which he cut away bit by bit, and not excise the whole length of the wound, as adhesion thereby would seldom ensue throughout; but if only a part at a time was attempted, it had a far better chance of succeeding. To excise the edges it is necessary to pierce them with the bistoury, and cut outwards, it being very difficult in any other way to do it, as the membrane is very soft, and from the calculeous deposition that is invariably present, quickly destroys the cutting edge of the instrument. An obstacle that frequently prevents the healing of the wounds is, that the mucous membrane forms a kind of hernia in the bladder, which must be destroyed, or the adhesive inflammation will not be produced. There is another obstacle to the healing, from the very great facility of the parts being disturbed, from the moveable condition of the bladder, which is excited by sneezing, on the action of the abdominal muscles. Mr. Earle believed that if metallic ligatures could be sufficiently malleable, so as to admit of being drawn as closely together as thread, they would be found serviceable, and probably not encountering the same obstacles as the others.

In one case related by the President, which had admitted of a cure, cicatrised bands had formed across the vagina, so as to prevent his reaching with the finger the os tincæ, which might be regarded as an obstacle to the delivery of the patient, who became pregnant; but as this process advanced, the bands became absorbed and parturition was easily accomplished, and also in the two succeeding pregnancies.

Mr. Macilwain attempted to give to the Society the result of his unsuccessful experience in the treatment of these unmanageable affections, and, as he had found, unmanageable patients; for they had usually left him before the means employed had a chance of proving their power. He (Mr. M.) related a case

that had been under his cure, where the communication existed between the bladder and rectum, but, like the rest, eloped before he had time to achieve a cure; but, however, about a twelvemonth after, he was requested by a friend to inspect her body, and of course was very anxious to look into the rectum, but found not the least trace of the affection, of which time alone had perfected a cure.

The President then announced, that as their next meeting would be the last for this session, it would commence at half-past 8 p.m., when a paper would be read on "Hypertrophy and Atrophy of the Brain, by Dr. Sims;" and one had been promised by Sir B. C. Brodie, but not yet received. The meeting was then adjourned.

MEDICO-BOTANICAL SOCIETY.

New Minim Measure.

At the meeting of the Medico-Botanical Society which took place on the 12th inst., a new minim measure was exhibited, the invention of a gentleman of the name of Alsop, residing in Sloane-square, Chelsea. A communication from the same gentleman was read, in which he pointed out what he considered to be its advantages, previously showing the inconveniences of the present measure. The latter were principally the difficulty of measuring accurately very minute quantities, and the inutility and, indeed, impropriety of trusting to drops was afterwards strongly insisted on. The variance in quantity of drops of different preparations, both in regard to the nature of the fluid itself and the size of the neck and lip of the bottle in use, has been long since acknowledged and acted on, but the other source of objection urged by Mr. Alsop is not quite so feasible. If it were found impossible to measure any small quantity of a medicine, two minims for instance, double or treble the quantity might be put in the glass, a certain quantity of water added, and then the half or a third of this solution might be employed, which would give the dose required.

To obviate the difficulty just alluded to, Mr. Alsop has had constructed a graduated glass tube, with a large opening at the upper end, and a smaller or capillary one at its lower extremity. It is worked by a piston, which fits closely to the sides of the tube, but does not come down close to the lower orifice, there being, therefore, a column of air between it and the opening. In order to use it, the lower end is immersed in the fluid of which some minims are required, and the piston pulled up; the column of air rises also, and a vacuum being thus caused the fluid enters. It is now to be examined, and if too much fluid has entered, depressing the piston gently will enable the operator to expel a few drops, until he has obtained the required quantity.

If there be too little, he must of course reimmerse it, and repeat the proceeding just described. The advantage of the piston not reaching to the lower orifice is, that a column of air is left between it and the opening, which rises when the instrument is used, intervening between the fluid and the lower end of the piston, and thus prevents any of the medicine adhering to it, which in some cases, as where hydrocyanic acid, &c., are employed, might be injurious. The instrument is cleaned in the same way that fluids are measured, by drawing up a quantity of water into it.

We have already assigned the reason which induced Mr. Alsop to turn his attention to this subject; it now remains for us to point out what appear to be, at least in our opinion, its inconveniences. We have already shown that it is uncalled for—it is unnecessary; still were it really an improvement, were it an instrument capable of general application and use, the inventor would deserve the thanks of the profession; as it is, he merits the meed of praise for this instance of skill and ingenuity.

We fear much that it can never come into general use, as the length of time occupied in measuring minims with it must always preclude persons who have much dispensing from employing it. Judging from the time spent on the 12th in exhibiting its uses, it must require at least four times as much as the common, and, in our opinion, very useful minim glass of the shops. This is one very great defect; another is, that being longer and more cumbersome, and also from its having two openings, necessarily without a stand, it will be much more liable to be broken, and as it must be necessarily much more expensive than the glass now used, this will form a serious objection against it. Again, though Mr. Alsop's measure was twice the length of the ordinary one, it yet was graduated only to thirty minims, the latter being scaled up to sixty; and it is evident that the former could not be carried to a higher figure without making it much longer, on account of the piston requiring a certain space to play in, and also because the column of air occupies some room. For these and other reasons we are inclined to think that Mr. Alsop's invention, although ingenious, will not be brought into general application.

BRANDY.

SINCE I have mentioned brandy, it were indeed to be wished either that it was wholly forbid, or at least used only to recruit the spirits, and not to occasion a stupefaction, or that it was totally prohibited to use it internally, and only be allowed to apply it externally by surgeons, in fomentations, to digest ulcers, or to heal burns.

SYDENHAM.

CASE OF PROTRACTED PREGNANCY.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—If you think the following case worthy of insertion in your Journal, it is at your service.

Derby, May 12th, 1835.

MEDICUS.

Mary Stretton, aged 27, the mother of five children, states that from the circumstance which attended her, during her last pregnancy, she believes that the period of gestation was protracted at least *five weeks* beyond the full course which attended her four preceding instances. She was delivered on the 26th of February last of a fine male child, well formed, and possessing general appearances corroborative of the testimony of the mother, and which weighed twelve pounds avoirdupois. She never menstruated between the two last children, contrary to her former habit, and believes she was two months advanced in pregnancy of her fifth child before she had weaned the fourth. There was no other particular variation in the symptoms of her last pregnancy from those of her former ones except the duration, and the circumstance of her not menstruating. The right leg began to swell during the second month of her pregnancy of this as well as of all her other children; her stomach began to be affected in the usual manner and at the same time, and her "reckoning" was accordingly to terminate at the usual period. She had made preparations for her lying-in, such as obtaining a grant of linen from a bed-lying charity, and had given in her statement when she should require it correspondent to her present history. She had never been deceived in her calculation as to the exact period of her pregnancy, nor does she believe she can be deceived in the present instance. Her other children were full sized at their birth, and are still living. She was under continual "fear of herself" for the last month or more of her time; felt confident something was going on wrong, and frequently expressed herself to her mother that such was her belief and conviction that she was going a good deal beyond her time. She was, however, safely delivered on the 26th of February. It is proper to observe that an accident befel her (dislocation of her ankle) when she considered herself six months gone with child, which compelled her to keep her bed upwards of three weeks. This circumstance she frequently lamented to me during my attendance, as being likely to interfere with her labour, which she expected in three months, and her size and appearance justified her predictions; but upwards of *five months* elapsed before that event took place. The above in-

quiry ensued in consequence of the voluntary observations of the patient relative to her belief of her having so far passed the usual period.

ON THE ARROW-ROOT, THE VARIETIES TO BE MET WITH IN COMMERCE, ITS ADULTERATION, AND THE MEANS OF RECOGNISING IT.

BY J. M. STANLY WALSH.

UNDER the name of arrow-roots are included the fecula of the tuberose roots of several monocotyledonous plants of the genera *aroidæ* and *amomea*, such as the *Maranta arundinacea*, the *Maranta Indica*, the *Curcuma angustifolia*; the *Pacca pinnatifida*, of the genus *Narcissea*, also possesses a white and unctuous fecula, which the English prefer to that of the *Maranta*.

In commerce, arrow-root is often mixed with rice or wheat flour, oatmeal, and more frequently still with the fecula of the potato, but more especially with the farina of the cassava, with which it is most frequently adulterated.

The rice and wheat flour and oatmeal may be distinguished from the arrow-root by the azotic principle which they contain, and the ammoniacal products which they give up when subjected to distillation. But the fecula of the potato and the farina of the cassava resembling the arrow-root so far, and these three substances being very analogous in some other respects, more numerous and varied experiments were required in order to prove a difference.

It has been ascertained that the fecula of the potato is not soluble in cold water, but that the cassava, and especially the arrow-root, are sufficiently capable of solution.

The jellies obtained by equal proportions of boiling water on each of these three substances are unequally thick, the cassava being the least consistent, next that of the arrow-root, and finally that of the potato. Water dissolves the latter more slowly than the other two: the jelly of the arrow-root is especially remarkable for the facility with which it dissolves in the mouth.

Arrow-root, pressed in the hand, makes a noise, and preserves the impression of the finger; these two characters are wanting to the fecula.

The farina of the cassava preserves the impression of the finger: it is always distinguished by a slight odour and rather acid taste.

Examined by a microscope, the arrow-root presents isolated grains, like those of the fecula, but instead of exhibiting, like them, a single circular impression it shows two.—*Journal de Pharmacie.*

THE

London Medical and Surgical Journal.
Saturday, May 23, 1835.

A FEW HINTS ON THE PROSPECTS OF
MEDICAL REFORM AND EDUCA-
TION.

At the present moment it would be difficult for even the most clear-sighted to prognosticate when the question of medical reform will come before the legislature; anxiety is expressed on all hands to know what progress is making with reference to its long expected consummation. The promoters of the Medical Committee in the House of Commons are accused by one party of indolence, while another exonerates them of all blame, by asserting that their labours are being carried on with activity, but that the numerous documents to be examined, together with the perplexities in which they are involved, give the prospect of an indefinite delay. A week, or even a month, values little where labours of so prodigious a description are taken into the account. Mr. Warburton, the Chairman of the Parliamentary Medical Committee, although actively engaged in pursuit of the grand object our profession has at heart, is, nevertheless, from the multiplicity of his other arrangements, incapable of very quickly bringing the question to issue. It is added also, that the confusion into which the papers relating to the subject of medical reform were thrown at the time of the late fire at Westminster, together with the loss of some of them, contributes to the postponement of a final inquiry. Whether they are entirely destroyed, or have only been mislaid, or disappeared for a time, has not yet been clearly ascertained. At all events it is doubtful whether a fresh committee will be moved for (the old one being defunct contemporaneously with the last

parliament), or a report sufficient to work upon be gotten up from the information already obtained. As affairs stand, it is most likely that the committee will be reappointed on the motion of Mr. Warburton, whose sagacity and judgment may be thoroughly relied on, and that, accordingly, the work of medical reform is not quite so near its completion as might have been fondly anticipated; upon the stability of the present ministry, in a great measure, will its quicker or slower development depend.

In the meantime it may not be unprofitable to take a slight survey of the state of affairs in the medical world at the passing moment. The two Colleges, on which the profession have too long had reason to exclaim "a plague on both your houses," remain like the spirits daunted of olden times and laid in the Red Sea, quiet, or, if unquiet, at all events unheard. The friction with public opinion they have undergone, seems all unnoticed. Inebriated with power, they float on the surface of their corporate Lethe without a look forwards. Demigods in their own conceit, they cling to the old thorn of their worship, forgetful that the young blossom of public opinion is supplanting it; inadvertent that they are hugging a rotten skeleton, and enveloped in its gripe hastening downwards to Avernus. Pierce *them* with the light of truth—Nonsense! as well might we attempt to pierce adamant with a rush. And yet this is the time, if ever, when daylight ought to shine through them. Now, while breathing time is given by an unexpected succession of events, ought they to look into the management of their household, and rectify its errors. Now, ought they to show that willingness to undergo reform which, although it may but precede the necessity, will render that necessity more graceful

and becoming. We could wish their hoary heads, undecked with oaken or laurel chaplets though they be, rather bent than crushed beneath the hand of wisdom and the pressure of the times. But if their purblind prejudice—their love of dross superseding love of human nature—will render them as blind to passing events as if they were inhabitants of another planet, let them take the consequences, and, like Lucifer begirt with pride and unacknowledged dignity, tumble their “nine days’ descent” from the palaces of their infirmities. *Ita fiat.*

The “din” from Apothecaries’ Hall betokens different results. *They*, at least, have consulted that oracle which never fails its votaries, and, “*coute qu’il coute,*” attempted to show a front which, although it may be destined not to shine long, will, when consigned to an eclipse, leave a memory of its brassiness behind. Not all unmingled with silver though shall its brightness gleam. Some good points, some marks of energy, some redeeming qualities, mingled with a mass of petty tyrannies, have signalised the twenty years’ march of this scientifico-medico-commercial corps.

Among their better efforts may be reckoned the desire they have exhibited for an enlarged preliminary education in their Licentiates. This desire they have uniformly expressed in all their manifestos, and carried into execution in a *certain degree* in their examination of candidates, in *operibus Celsi Gregorii, &c.* They also seem to have considered medical science as of moment as well as their own own aggrandisement, and in consulting their dignity looked around and endeavoured to nourish the root of it. This is more than the Colleges (called so, *par excellence*) have done; and in so far a trading body has outstripped these sci-

entific ones on their own grounds. They took up the cudgel when all the medical world felt deeply its want of regular organisation; *but*, when every citizen of that world was, *nevertheless*, careless of both the dignity of the profession and its advancement, heedless of whether fruit should be demanded from the institutions then in existence, or, in default thereof, new ones should be created—at such a moment did this body, which now by its own confession has attained its full growth, spring up, and, having obtained the right to exercise some authority in the before anarchic state of the profession, used that right to a great deal of good and some bad purpose.

We have said thus much because we are of opinion—and who is not?—that a speedy reform in our professional establishments of every description is of the last importance to society. Time wears away, and disappointment lies heavily on the breast of hope; but we would anxiously exhort all to be prepared for the impending day of its fruition. *That* cannot be much longer protracted; and, when it comes, its efficiency may remind us of that powerful expression,—“*Diu parturit læna, sed leonem;*” in a word, the delay will but have made the measure of our reform greater, since more cogent and pressing reasons for its necessity are daily presenting themselves.

And now, when the medical world throughout feels the want of regeneration and reorganisation, so far as its laws are concerned—when every member of its body who has a head to think is anxious for the promotion and enlargement of the science, for uprooting, *ab imis*, the institutions which, instead of protecting, infest it, or for trying what a salutary pruning may effect:—now, when the olive-branch of peace or the sharpened

sword of war is in requisition, as the case may be, to welcome or destroy—now is the time for all medical practitioners to be inspired with one impulse, to be of one unwavering opinion, to sink minor differences and matters of mere detail in their schemes of improvement, and to march forward, firm and undivided, to the fulfilment of their rational expectations. Let each who has not thought before now begin to think, and those who have been in the habit of reflecting exercise that faculty doubly. This unity of action and opinion is absolutely necessary, that the Conservatives of ancient abuses may not take advantage of our “jarring state,” nor, as heretofore, point at us as being too ignorant to investigate and determine upon what remedies are required to heal our long-endured and multiplied wrongs. Let our brethren, both seniors and juniors, study and become acquainted with the sea on which they are steering, so that, guided by the light of knowledge, they may do justice to independence, and, avoiding on the one hand principles too flexible and accommodating, look out sharply on the other, in order to sail clear of the wild whirl of giddy and destructive innovation.

MARCH OF THE POOR-LAW COMMISSIONERS.

THE Poor-Law conjurors are going on bravely; scudding over the surface of the country, they arrange their battalia of recruits in such order as seems best to their well-paid and high worthinesses. It is not, however, enough for these pauper gaolers and judges, for they unite both offices, and we know not how many more, in their proper persons to drill and starve their “*especial subjects*,” and to

write sneering pamphlets upon their miseries, but they must insult our profession also, by advertising their want of us at the *lowest price*, to combat in their regiments the host of diseases which their government will soon introduce among them. We trust, for the honour of the profession, that their mean-spirited call will be unresponded to, and that their *bettors*, because *independent men*, the *medical practitioners*, will, if they afford their services, do so at an *honourable and fair* compensation. Let any one look at the advertisements of these Martineau-Malthusian quacks, and if he has an atom of brain in his skull, or a pulse of spirit in his heart, we answer for it, he can feel nothing less than the most unqualified disgust, both at their demands and wording. “*Five Medical Men WANTED*,” says one we saw the other day; and then it proceeds to describe the stingy Jack-in-office conditions on which the medical *men* are to be *hired*; and this too from parties who open wide their jaws to snatch the morsel out of the shivering and starving mouths of wretched paupers! men whose office it is to stint and grind the faces of the poor. Away with their advertisements, say we; but if they want our aid, as too surely they will in an awfully increasing ratio, let them address us as gentlemen, not as hucksters.

DYSPEPSIA.

IDIOPATHIC, or simple dyspepsia is very rarely fatal; but often proves so when it is symptomatic. The former often continues many years without producing disease in any other part of the body: sometimes, however, by long duration, emaciation, cachexy, and dropsy follow. As Mr. Abernethy justly observes, the duration of such complaints, without fatal consequences, shows that it is a disorder of function, and not a disease of structure.

DR. WOODFORD.

BARTHOLOMEW'S HOSPITAL.

THE introductory lecture of a course upon the Elements of Mechanics, Hydrodynamics, and Pneumatics, was delivered at the Anatomical Theatre of this school on Saturday, the 2nd of May, by Professor Griffiths.

It affords us much gratification to observe that a disposition has of late been evinced in several of the metropolitan schools to promote the cultivation of experimental philosophy as a part of medical education. The attempt is in conformity with the spirit of the age, and with the advances which education is rapidly making in all classes of society, and although, like other improvements, it has at present to contend with the difficulties of novelty, those, for instance, entailed by a limited attendance of pupils, and a remuneration which is often inadequate, yet there is no reason for doubting, but, on the contrary, good grounds to expect, that a few years will see the system universally recognised and adopted. Those whom no motive is capable of inducing to march at all in the van of improvement, interest will eventually compel to bring up the rear. The track which a spirited *ολιγοι* are beating, the tardiest of the *πολλοι* will at last have to tread. The advantages which are at present held out by individual schools, the remainder must shortly for their own sakes afford; the knowledge which is at present sought by individual students, the remainder must soon, for their own sakes, acquire. Those, meantime, who are the first to discern the advantages, and to undertake the introduction of the system in opposition to their own immediate interests, certainly deserve our respect and gratitude.

It cannot, indeed, be too often or too strenuously urged upon the medical students of the day, that the present is an epoch of no ordinary importance; that the existing generation is the hinge upon which a great mental revolution is destined to turn; that high and low, rich and poor, are now entering together the arena of science; that the current is gathering strength as it rolls; and that unless their exertions to keep pace with the swift advances of intelligence be vigorous and unflinching, they will speedily find themselves outstripped in the race. These are no times for indolence or inactivity. Great changes have already been made,—greater still are at hand. Amidst these changes, the medical profession can only maintain its superiority of rank, by maintaining its superiority of knowledge; and this proportion, it is evident, can only be preserved by advances corresponding to the popular progress. We commend this subject to serious consideration, and shall conclude with a brief notice of the lecture under review.

After adverting to the pleasure he experienced in meeting his class within those walls, for the first time, the lecturer proceeded to set forth the advantages derivable from an acquaintance with Natural Philosophy, by instituting a comparison between the state of science

in those days of gain, speculation, and wild theory, when experiment was regarded as beneath the dignity of the true philosopher, "whose business," said they, "consists in the exercise of the reasoning faculty, and not in the mere application of the hands or the eyes, and whose true and legitimate office it is to account for those phenomena which the vulgar are occupied in finding," and its progress in our own times, when an opinion exactly the reverse prevails, and theory gains little esteem or credit, unless backed and confirmed by experimental evidence. He also took occasion to point out that the sciences stand necessarily dependant, each on the other—that mechanics, for instance, has borrowed from hydraulics the principle of an engine of astonishing and scarcely limited power, the hydraulic press, and has applied the elastic force of caloric to string that giant arm, which waits but man's bidding, like the geni of the lamp, to wage successful war with the elements themselves:—that physiology again requires, for its complete elucidation, acquaintance with chemistry, mechanics, hydraulics, pneumatics, acoustics, and optics; the first to disclose proximate and ultimate structure, and to account for the various processes of digestion, nutrition, and secretion, the renewal of blood in the lungs, and the maintenance of the vital heat; the second to indicate the relations of the muscular and osseous systems; the third to explain the phenomena of the circulation; and the remaining three to develop respectively the mechanism of respiration, audition, and vision:—and that, in short, the divisions of science are artificial, and have no real foundation in nature; so that neither can the precise boundaries of any one, nor the degree in which it may bear upon the others, nor the remotest point to which its analogies may stretch, be in any case with certainty defined.

The professor then touched in succession upon the subjects of the present course, giving general views of each, (which, though clear and distinct, are, perhaps, too elementary for insertion here,) and illustrated his remarks by experiments and apparatus of remarkable simplicity; devised, indeed, with an express view to facility of repetition or construction by the student himself.

We regret our inability to give a more extended report of this very interesting discourse, but must conclude by wishing Mr. Griffiths that success which he has, thus far, shown himself so well to deserve.

Foreign Hospital Report.

PENNSYLVANIA HOSPITAL.

Tardy Union of Fractures—Friction of the Fragments.—Dennis M Fadden, aged 30, labourer, of good constitution, but rather intemperate in his habits, was admitted on the 16th of May, 1834. While engaged, on the

previous afternoon, at the Falls of the Schuylkill, assisting to raise heavy stones from a quarry by means of a windlass and lever, by some means he lost his hold, so that the lever in passing round struck him violently upon the left arm, producing a fracture of the humerus, midway between the elbow and shoulder, throwing him a distance of ten feet upon a pile of stones, and producing a fracture of the os femoris six inches from its inferior extremity. He has also received a severe contusion of the side, but no ribs were fractured. The arm was placed in pasteboard splints, and Dessault's apparatus applied to the thigh.—Ordered evaporating lotions; cups to the side.

22nd. Pain in his side relieved; small portions of blood were noticed in his expectoration for the first four days after his admission, but none since. He has had another application of cups to the side, and been purged with magnes. sulph.

26th. Has no fever; swelling of fractured limbs subsided; good appetite; bowels open.

Aug. 15th. From the date of the last report the patient has been gradually recovering from the effects of the injury: he has had no pain in his side, nor difficulty of breathing; and although his appetite has been rather variable, digestion has been well performed, and he has expressed himself as feeling well in every respect; he has, however, lost flesh since his residence in the hospital, and his countenance has a rather pallid aspect. The fractured limbs have been kept perfectly at rest; but thus far no union has taken place in either bone.

Sept. 1st. On the 16th ult. friction of the ends of the humerus was made for the first time with considerable force, and continued for a few minutes without giving pain to the patient. This plan was persisted in daily for one week, when the parts began to be tender; during the next week it was done only every other day, and the pain of the operation increased on each repetition of it; the femur is uniting.

15th. There appears to be a slight stiffening of the humerus; no friction has been made since last report. Although no friction has been employed between the fragments of the femur, the patient is able to raise his leg without assistance; splints removed.

30th. The humerus is now evidently uniting, and bears considerable force to be applied to it; it is still kept in splints.

Oct. 12th. Since last report the firmness of the fractured bones has been steadily increasing; the patient's general health has been good, and he has gained flesh and strength. He is allowed to walk with crutches. Splints continued to the arm.

Nov. 1st. Walks short distances without his crutches; the union of the humerus is so perfect that the splints have been removed to day.

22nd. He has regained, in a great measure, the use of both his injured extremities. Discharged

Absorption of the Callus in a case of Fracture, after union.—William Bruin, æt. 21, a carter, of good constitution, and enjoying good health, was admitted into the hospital on the 16th of April, 1834, with fracture of both bones of the leg, about five inches above the ankle, from the kick of a horse. There was no external wound, and a fragment of the tibia appeared detached. Suppuration took place, and a few small scales of bone passed through the opening. The separated portion of the bone united; suppuration ceased, and he was discharged on the 24th of June. The ulcer had been well one week previous to his discharge, and during that time he had been walking about the grounds without the use of his crutches, his limb being perfectly firm. He again returned to the hospital on the 24th of July, with an ulcer over the seat of the fracture. He states, that after going out he used his limb without inconvenience, but did not commence his usual occupation for a couple of weeks afterwards, and that after being employed for a few days he found the limb more painful; he continued to use it, however, and to live freely. One week before his readmission, the ulcer broke out, but was of small size. On the 28th a small spiculum was discharged, and the ulcer was reduced to a point. A probe introduced at this time detected a portion of soft, bony matter. On the 15th of August, without any assignable cause, the ulcer commenced sloughing, and extended rapidly; his health began to suffer; he had chills, followed by fever; lost his appetite, and became rather prostrated. The sloughing was finally arrested by the application of caustic potash over the whole ulcerated surface; at this time it was observed that the callus uniting the fractured tibia was completely absorbed, and that the fragments were perfectly moveable, this separation of the bone appearing to occur simultaneously with the sloughing of the soft parts. The caustic was now applied to the exposed bone; considerable inflammation occurred a few days afterwards, but the parts soon took on a healthy action, and gradually improved, union taking place between the fragments of the tibia, so that by the 25th of October the ulcer had nearly healed, and the bone had become so firm that it was removed from the fracture box.

November 11th. The bone is firm; a very small ulcerated surface exists over the anterior face of the tibia, through which several small portions of bone have been discharged within the last ten days; his general health is good; he is not yet allowed to walk.

December 1st. There has been no discharge from the leg for ten days past, and the patient is walking without crutches.

Absorption of the Callus in a Case of Fracture, after Union.—Matthew Kiniff, æt. 27, while driving an omnibus in the upper part of the city, on the 28th of August, 1834, fell from his box, and the hind wheel of the

heavy carriage passed across the left leg, (which was bent at a right angle with the thigh) about four inches below the knee; thence up along the thigh and side, producing a fracture of the leg, and of four or five of the ribs, with severe contusions of all the intermediate parts. He was immediately carried to the hospital. The effusion was great in the whole extremity, and particularly so below the knee. He had severe pain in his side, with difficult respiration; a small portion of blood was expectorated immediately after the accident; none afterwards. The limb was placed in a fracture box, and lotions applied to the leg; bandage, &c. around the chest. Excepting the pain from the swelling, which increased immensely, he had no bad symptoms.

On the 4th of September, a swelling was first observed in the groin, at the part over which the wheel passed. It was not very painful, but increased rapidly for a few days; the parietes were thin, but it was deemed inadvisable to make an opening, although the fluctuation was very distinct, and the quantity of fluid collected probably near a pint. On the 10th, he commenced the use of a stimulating liniment. On the 15th, it was observed to be less tense, and has since disappeared so rapidly, that now (16th) but little remains. He breathes without difficulty when quiet, but cannot bear motion; the swelling has disappeared almost entirely from his limb; his health is good; he is allowed a good diet.

30th. There is some stiffening of the bone; the swelling in the groin has subsided almost entirely; some tenderness still remains at that point; a collection of bloody serum, just below the knee, has been opened.

October 1st. The fractured portions of bone have united; there exists, however, considerable inflammation from the knee to a short distance below the seat of fracture.

4th. There is still a discharge of the serum, with oily globules (softened fat?) floating in it, and some sloughs of cellular substance.

12th. The swelling below the knee has gradually increased; it fluctuates slightly; a fluid may be pressed down from the knee, as far as the spot where the tumour appears to point, and which is opposite the seat of fracture. Upon opening the tumour, the only discharge was about a gill of dark, grumous fluid, with small portions of coagulated blood. For the last three days, a decided diminution of the firmness of the bone has been observed, and to-day the absorption of the callus appears complete, as the fragments are perfectly moveable. The limb has always been kept in the fracture box.

17th. He has a large discharge from the second opening made below the knee; general pain throughout the limbs with fever and loss of appetite.

30th. Soon after opening the tumour, a very copious suppuration commenced, and continued several days; within the last few days there has been a stiffening of the bone.

Nov. 10th. Union has again taken place between the fragments, with a great diminution of the suppuration, and healthy granulations of the ulcerated surface; general health good.

Dec. 1st. Bone continues firm; ulcer healing.

British Hospital Report.

WESTMINSTER HOSPITAL.

Epistaxis.

James McBean, ætat. 34, was admitted Dec. 3rd, 1834, into Northumberland Ward, under the care of Mr. White. Is a man rather above the middle height, apparently muscular, but not of the sanguine temperament. A few days previous to his admission he met with an accident, falling down and striking the left side of the head against the ground; it was immediately followed by hæmorrhage from the nose, which was not arrested until he had lost a considerable quantity of blood, and it has occasionally returned since.

During the early part of childhood he was subject to epistaxis, but which, until the present accident, had not recurred since his eleventh year. Is a coal porter by trade, and accustomed to drink from three to four pints of porter every day; he sometimes will take more, but says he has never had less. He is married, and has four children, in none of whom has any tendency to hæmorrhage manifested itself.

During the few days which elapsed between the accident and his admission into the hospital, he had several attacks of epistaxis, which were always preceded by a feeling of weight and pain in the head, swelling of the face, and a most uncomfortable sensation of fulness about the bridge of the nose; these feelings were always either lessened or removed whenever hæmorrhage took place, if to a large amount. He says that, to speak within bounds, he must have lost at least five pounds of blood by the recurrence of the bleeding.

When he was brought to the hospital, he was labouring under a severe attack of epistaxis, having lost a very considerable quantity of blood; the face was pale and exsanguine; the pulse scarcely to be felt; and he appeared on the point of falling into syncope every instant. He was instantly placed in bed, the nares plugged, and cold applied in a bladder over the upper part of the nose.

On the 6th inst. the hæmorrhage again recurred, and was arrested by similar measures. On the 7th he complained of great weight and pain in the head, with fulness about the eyes and nose, contracted pupils, dizziness, great inclination to sleep, furred tongue, face rather flushed, and a full pulse. He was immediately bled from the arm until he became faint,

and the pulse was diminished in volume and strength: twenty ounces were abstracted, and the weight of the head, eyes, &c., was nearly entirely removed. He was ordered to keep quiet, and to preserve the recumbent posture. The blood, when examined afterwards, was cupped and very firm.

He was soon after put on the use of the acetate of lead with hyoscyamus, taken twice a day. This plan was continued for a few days, and then omitted; no hæmorrhage having occurred, the plugs were removed on the 14th. Up to the 27th he continued to improve; he did not suffer from headach, nor had he any unpleasant sensations; the pulse was soft and regular, the bowels open, and, in fact, he had improved so materially, that he was ordered to be discharged. For some reason or other, this intention was not carried into execution, and, as it proved, it was fortunate that it was not.

Early in the January of 1835, he had two slight returns of epistaxis, for which he was cupped with relief. On the 9th of the same month it again attacked him, preceded by the symptoms premonitory of former hæmorrhages. It was now deemed necessary to abstract blood from the arm, and twelve ounces were taken with decided relief; the blood was cupped and buffed.

From this date he had no return of hæmorrhage; the peculiar disposition was, however, still occasionally evident, for he sometimes suffered from headach, fulness about the head, nose, &c., but never to the extent he had, and the pulse remained soft and regular. Low diet, the recumbent position, purgatives, and rest, succeeded in removing these symptoms, and he was discharged on the 19th of February.

EFFECTS OF TEA.

In the eighteen hundred cellars of Liverpool there are many in which animal food is not tasted more than once a-week; but there are very few in which tea is not drunk daily: it is often, indeed, drunk twice a-day. The money spent in tea is worse than wasted; it is not only diverted to an article that affords no nutrition, but to one that debilitates the empty stomach, and incapacitates for labour. Hence the vast number of dyspeptic complaints among our patients at the public charities, which are almost all to be traced to the use of tea, or spirits, often, indeed, assisted by depression of mind. At the Infirmary and Dispensary together, this class of patients exceeds five hundred annually; the great majority are females.

DR. CURRIE.

PRIZES DELIVERED AT THE LONDON UNIVERSITY.

- CLASS 1.—Dr. ELLIOTSON, Professor of Practice of Medicine.
Mr. Thos. Bradshaw—gold medal.
George Gibson Holmes—silver do.
George Rigden—do. do.
Philip Barnard Ayres—do. do.
- CLASS 2.—Dr. QUAIN, Professor of Anatomy and Physiology.
Mr. Thomas Tyerman—gold medal.
Philip Barnard Ayres—1st silver do.
Thomas Morton—2nd do. do.
- CLASS 3.—Dr. TURNER, Professor of Chemistry.
Mr. ——— Leggatt—gold medal.
W. C. Binks—1st silver do.
Thomas Tyerman—2nd do. do.
- CLASS 4.—SAMUEL COOPER, Esq. Professor of Surgery.
Mr. Thomas Morton—gold medal.
Thomas Bradshaw—1st silver do.
Henry Walker—2nd do. do.
- CLASS 5.—Dr. DAVIS, Professor of Midwifery.
Mr. Thomas Morton—gold medal.
Arthur Tibson—1st silver do.
Samuel Ward—2nd do. do.
- CLASS 6.—RICHARD QUAIN, Esq. Professor of Practical Anatomy.
Mr. Thomas Bradshaw—gold medal.
William Lord—1st silver do.
Henry Walker—2nd do. do.
- CLASS 7.—Dr. GRANT, Professor of Comparative Anatomy.
Mr. William Henry, the gold medal.
(No silver medal given.)
- CLASS 8.—Dr. THOMPSON, (Anthony Todd,) Professor of Materia Medica.
Mr. William Marsden—gold medal.
William Weston—1st silver do.
Morehouse—2nd do. do.
- CLASS 9.—Dr. ANTHONY TODD THOMPSON, Professor of Medical Jurisprudence.
Mr. Egerton Baines, first present of Books from the Professor.
Mr. F. Cripps—second do.
Thomas Bradshaw—third do.
- CLASS 10.—Dr. LINDLEY, Professor of Botany.
Mr. Arthur Tibson—gold medal.
Philip Barnard Ayres—1st silver do.
Thomas Baskerville—2nd do. do.

PRIZES DELIVERED AT GUY'S HOSPITAL.

- First year's Anatomical Prize—Mr. Robert Young.
Second year's Anatomical Prize—Mr. Godfrey.
Surgical Prize—Mr. Blackburn—Mr. Hankins, equal.
First year's Midwifery—* Mr. Springall.
Second year's do.—Mr. Golding Bird.

* A Mr. Vauley being nearly equal with Mr. Springall, had a prize of inferior value awarded to him.

MISCELLANEOUS.

Dr. Locock has been elected consulting physician to the General Lying-In Hospital. Dr. Ferguson has been elected physician-accoucheur, in place of Dr. Locock, resigned.

In consequence of the death of Mr. Sandford, the offices of surgeon to the Female Orphan Asylum and General Lying-In Hospital have become vacant.

Dr. Charles Henry has resigned his office of physician to the Manchester Infirmary.

University of St. Andrew.—This University has conferred the degree of M.D. on the following gentlemen:—Zacharias Barnes Vaughan, Liverpool; William Carroll, Ireland; H. G. Lyford, Winchester; William Brewer, Norwich; David Baxter, Dundee; Andrew Ross, Newmarket; F. Mackellar, Dundee; Thomas Kerans, Ireland; Humphry Sandwith, Bridlington; David Fenton, Altham; Charles Wm. Covernton, London; James Edwards, Forfarshire; David Murray, Forfarshire; Robert Bryden, Demerara; Alexander J. Lizars, Edinburgh; Charles K. Vacy, Cornwall; Thomas B. Harness, Devonshire.

At a general half-yearly Board of the Salop Infirmary, on Tuesday, the following resolution was carried by an overwhelming majority;—"That, in consequence of the facts proved and the verdict recorded, in the case of *Wilton v. Webster*, at the last assizes, it is the opinion of this Board, that Dr. Webster ought not to be allowed any longer to act as one of the physicians of this institution; and that the secretary be directed to erase his name accordingly." This is the gentleman who seduced a patient, a married woman, under circumstances to which we thought it our duty at the time to advert in strong and justly deserved terms of indignation.

On Monday, at the Sussex County Hospital, Mr. Tayler successfully took up the iliac artery for inguinal aneurism, an operation requiring great steadiness in consequence of its infrequent occurrence. Mr. Stanley, lecturer at St. Bartholomew's, was at the operation, of which he expressed his unqualified approbation.

The number of bodies anatomically inspected at the Provincial Schools of Medicine and Surgery under the present Act of Parliament, during the years 1833 and 1834, are—Birmingham, 43; Bath 5; Bristol, 24; Cambridge 1; Exeter 1; Hull, 4; Leeds, 37; Liverpool, 22; Manchester, 37; Nottingham, 1; Sheffield, 30.

The members of the medical profession resident in East Kent were to meet on Thursday week last in Canterbury, "to consider what steps ought to be taken in consequence of the degrading terms for attendance upon the sick poor proposed to medical men under the new Poor-Law Act." The meeting was called by Drs. H. W. Carter and R. Chisholm, physicians to the Kent and Canterbury Hospital.

APPOINTMENTS.

Military.—Dr. Collis Christopher John De'emege, assistant-surgeon to the 27th Foot. Staff Assist.-Surgeon Robert Henry Neville, assistant-surgeon to the 57th Foot, v. Armstrong, deceased. The following changes have taken place upon the Irish Medical Staff:—Assistant-Surgeons M'Iver, Pope, and More, to Cork, vice Ewing, Dartnell, and Ledingham. Hospital Staff—Assistant-Surgeon Alexander Stewart, from the 2nd Dragoons, to be surgeon to the Forces, v. Forster, whose promotion has not taken place. Alexander Grayson, M.D., to be assistant-surgeon to the Forces, v. Neville, appointed to the 57th Foot. Robt. Lawson, gent., to be assistant-surgeon to the Forces, v. Inlay, who resigns.

General.—Dr. John Burne, of Spring-gardens, physician to the Westminster Hospital. Mr. Peter Cullen, surgeon to the Sheppy Union under the Poor-Law system. Sir James Murray, M.D., medical attendant to Earl Mulgrave, the new Lord Lieutenant of Ireland.

DEATHS.

Dr. George Pinckard, of 18, Bloomsbury-square, suddenly. Mr. Joseph Pass, of Howden, York-shire, surgeon, drowned. Mr. James M'Donagh, of Ranelagh, near Dublin, surgeon, formerly assistant-surgeon to the King's County Militia, suddenly. Dr. Maclean, of Liverpool. Dr. E. M. Greenshaw, of North Shields. Dr. Samuel Peacock, surgeon, of the 3rd Dragoon Guards, of apoplexy. Dr. Sutton, of Greenwich. Dr. Thos. M'Donald, of Crumlin, in the County of Down. Mr. Robert Ballantine, of Hobart Town, surgeon. Dr. St. John Skittowe, of Kinsale, Ireland.

WEEKLY BILL OF MORTALITY.

London, Tuesday, May 19, 1835.

Abscess	2	Heart, Diseased . . .	1
Age and Debility . . .	36	Hooping-Cough . . .	9
Apoplexy	11	Inflammation	24
Asthma	34	Inflammation of the	
Cancer	2	Bowels & Stomach	4
Childbirth	10	Inflammation of the	
Consumption	53	Lungs and Pleura	4
Convulsions	30	Insanity	1
Croup	2	Liver, Diseased . . .	20
Dentition, or Teeth-		Measles	16
ing	7	Mortification	2
Dropsy	22	Paralysis	1
Dropsy on the Brain	6	Small Pox	13
Epilepsy	1	Spasms	1
Erysipelas	1	Thrush	1
Fever, Scarlet	14	Tumour	2
Fever, Typhus	1	Unknown Causes . .	4
Gout	2		
Hæmorrhage	1	Stillborn	18

Buried, Males 200 Females 161 Total 361

Decrease in Burials reported this week, 142.

BOOKS RECEIVED.

The Pathology and Diagnosis of Diseases of the Chest; illustrated especially by a Rational Exposition of their Physical Signs, with New Researches on the Sounds of the Heart. By C. J. B. WILLIAMS, M.D., F.R.S. 8vo. pp. 208. 3rd Edit. Churchill.

CORRESPONDENTS.

H. B.—We recommend him to consult some medical gentleman on his case, as the difference of constitutions so modifies the treatment, that we could not, without actual examination, say whether vegetable or animal food would be most applicable to his disease.

A Constant Reader.—On examining the evidence of Sir H. Halford, in the Report of the Parliamentary Committee on Medical Education, we perceive that there is no certain time fixed for the forthcoming Pharmacopœia. It may be presumed, however, as eleven years have elapsed since the appearance of the last, that a new one will shortly be published.

H. W. Dewhurst.—We have received his long rignarole letter, denying that by placing his name to the puff on "*Brandreth's Pills*" he meant it for publication. We cannot insert letters of this description, and therefore leave Mr. Dewhurst to the tender mercies of the *Lancet*, and to settle his affair with the public, who will no doubt candidly appreciate his motives, as best seems fit to him.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE XIII.

Case of long continued Nervous Fever—Remarks on—Pleuro-pneumonia—Cases of Latent Pleurisy—of Pneumonia—Phthisis—Latent Ulceration of the Bowels in—Diarrhœa of Phthisis—Observations on the Stammering of Paralytic Persons—Its explanation—Very remarkable case of Stuttering cured by Chronic Laryngitis—Treatment of Hoarseness—Velpeau's new method of treating Sore Throat.

GENTLEMEN,—Permit me to make one or two observations on a case of which I have already spoken, and which, as I expected, has terminated fatally. A man, named Lynam, has been lying ill for a long time in the large fever ward; I wrote at the top of his card "Nervous Fever," and remarked to the class, that his disease was pure fever of a nervous type, unaccompanied by any symptoms indicating decided local inflammation. You will recollect that his symptoms were heat of skin, quick, weak, compressible pulse, thirst, watchfulness, and low muttering delirium, unattended by any appreciable sign of visceral disease, or any symptoms denoting a putrescent state of the fluids. It was not congestive or putrid, or gastro-enteric, or petechial fever; neither could it be called a cerebral fever; it was only by separating from it the idea of each of these species, and by studying its negative characters, that you could arrive at something like an accurate conception of the type of the disease. It was, as I have already stated, nervous fever, modified by the patient's previous habits of long continued intemperance. When a patient, addicted to intemperate habits, gets an attack of fever from cold, fatigue, or exposure to contagion, you will generally find the disease will exhibit a compound or mixed character, the phenomena of fever being combined with those

of delirium tremens. And so it was in this case; the man had general tremors, with persistent watchfulness, and muttering delirium.

His treatment consisted in the employment of medicines calculated to soothe the nervous system, and I kept a constant watch over the state of the principal viscera. About a week after he came under my care, and about five weeks from the commencement of his fever (for he was nearly a month ill before he came to the hospital), he was attacked with erysipelatous inflammation of the face and scalp. The disease commenced on the face, and; travelling upwards, very rapidly attacked the whole scalp and back of the neck, its progress being accompanied by great aggravation of symptoms. At that time I remarked to the class that I did not entertain any apprehensions of a metastasis of the erysipelas, that I had no fears of the supervention of inflammation of the brain, and its train of alarming consequences; but that no good was portended by this attack of cutaneous inflammation, and no relief of the internal parts could be expected from it, for every symptom appeared aggravated from the moment that the erysipelas commenced. I pointed out the total inadmissibility of anything like vigorous or antiphlogistic treatment, in a case where the disease had appeared in an individual of broken constitution, labouring under a combination of delirium tremens with low fever; and said that even the remedy which we had found most successful in similar cases, namely, sulphate of quinine and opium, offered but a feeble hope of arresting the malady. It failed, as we expected, and the man died yesterday, worn out by long suffering and exhaustion. Eighteen hours after death we made a most careful examination of all the viscera of the three great cavities; not a single organ exhibited the least mark of inflammation; we could not find any where even the slightest trace of local congestion. The man had all his viscera in an apparently sound and normal condition, and died of pure nervous fever.

Some persons look upon the existence of fever independent of topical affections as purely imaginary, and deem those, who have

recorded such forms of disease, as too ignorant, or too lazy, to make the necessary pathological investigations. I have not time at present to enter into this subject, but of nothing am I more convinced, than that fever may exist without any appreciable local lesion, that it may affect every organ and every tissue of the body alike, and yet that the most accurate symptomatologist cannot lay his finger on any one single part and say, here is local inflammation of a decided character. I have met with many instances confirmatory of this fact in hospital practice. I recollect a case which occurred some time ago at this hospital, which was equally remarkable for its extraordinary duration, as for the total absence of anything like visceral lesion. The patient was admitted into the small fever ward, labouring under an attack of nervous fever; he had thirst, hot skin, pulse from 110 to 120, occasional delirium and watchfulness, and these symptoms went on week after week, and month after month, unaccompanied during the whole course of the disease by any phenomena indicating the existence of local inflammation. His treatment was purely expectant and temporising; we had no cerebral, abdominal, or thoracic lesion to combat; there was no organ in which the febrile derangement could be said to have fixed itself exclusively, no threatening disorganisation calling for the prompt employment of new and energetic means. At last, after the fever had continued for very nearly three months, the man complaining all the time of more or less thirst, hot skin, watchfulness, and headach, with occasional delirium, the disease terminated in a well marked crisis, accompanied by sweating. He fell asleep, began to perspire, awoke with a pulse nearly reduced to the natural standard, and perfectly recovered. I may observe that I have never seen fever last so long as this, nor have I ever observed a perfect crisis in any case after the forty-second day. Some time ago I attended the brother of a gentleman now present, who had a long and very severe attack of fever; though he never had a remission during his illness, and was in very urgent danger, he got a perfect crisis with profuse perspiration on the forty-second day, and is now in the enjoyment of excellent health.

You perceive, then, gentlemen, that the case of Lynam presents some circumstances worthy of notice. His fever went on to its termination without any symptoms of inflammation in any viscus, and his actual condition, as carefully ascertained by an accurate post-mortem examination, affords a useful lesson to the pathologist. His case is also interesting as showing how previous habits will modify in a remarkable degree the character of fever; for in him you have seen fever combined with the phenomena of delirium tremens, a state of things which it was natural to expect in a man of extremely intemperate habits. The termination of the erysipelas without any sign of

disorganisation within the cranium is also worthy of notice. In such cases you have it frequently followed by inflammation of the brain and its membranes, and an exudation of pus on the surface of one or both the hemispheres; but here you perceive that there has been no extension of the disease, or nothing that should have induced us to give up the plan of treatment we adopted, and direct our therapeutic means to the head.

Let me now direct your attention to another topic. You have seen that a principal feature in the character of the present pneumonia is its complication with pleuritis, we have had several cases of inflammation of the lungs, combined with inflammation of their investing membranes, but I do not recollect that we have had a single case of pure pleuritis, or pure pneumonia. In the patient who lies at present in the chronic ward, labouring under pleuro-pneumonia, the inflammation occupied the superior part of the right lung in the first instance, and this is rather remarkable, as pneumonia generally commences in the lower part of the lung. Here, however, the pneumonia and pleuritis were located above, each being in point of extent nearly of the same dimensions, the portion of inflamed lung corresponding in its area to the portion of pleura engaged in the disease. Soon after his admission we found that the inflammation was making further progress, but its spreading was attended with this remarkable peculiarity, that while the pleuritic inflammation in the superior part of the right side of the chest became limited and ceased to extend itself, the pneumonic inflammation commenced travelling downwards and backwards, so that after two or three days we had pleuro-pneumonia in the upper part of the lung, and further down in the lower and back part of the lung it was merely pneumonia unaccompanied by pleuritis. This is an occurrence which I have frequently witnessed, that when pleuritis and pneumonia coexist, the latter will spread, often in spite of all our efforts, while the former remains stationary. I wish to impress this fact on your minds, that pleuritis never exhibits such a tendency to extend itself gradually, day after day, as pneumonia; if the pleura becomes inflamed, the extent to which it is likely to be engaged will be determined in twenty-four hours; whereas in cases of pneumonia, the disease, though limited at the commencement to one or two small insulated spots, will frequently begin to extend in every direction from these points, until in the course of a few days it involves a large portion of the lung. In other cases, many days are required before the spreading of pneumonia ceases.

This case is of considerable interest to the stethoscopic student, as exhibiting in a very satisfactory manner all the physical signs of pneumonia, as well in its pure state as where it is complicated with pleuritis. It is unnecessary for me to enter into any detail of the

symptoms or of the physical signs, but I invite you to study them as well worthy of your attention.

A patient has recently died who came into hospital labouring under a disease which generally proves fatal, namely, double pleuro-pneumonia. He had violent pleuritis and pneumonia in both sides of the chest under these peculiar circumstances: that in the left side the pneumonia was situated above and anteriorly, in the right side below and posteriorly; so that the lungs were affected nearly at the opposite ends of their transverse diameters. On his admission he appeared extremely low and weak, and it was obvious that the case must terminate fatally. His respiration was extremely quick and laboured; he had great oppression about the chest, constant anxiety, incessant harassing cough, quick weak pulse, and a countenance expressive of intense suffering. On examining the chest with the stethoscope we found that both lungs were extensively solidified, and this, combined with his age and the manifest sinking of the powers of life, prevented us from indulging in any hope of being able to arrest, much less to remove, his complaint. He was a poor creature moving in the very lowest class of life, ill fed, without sufficient clothing, most wretchedly lodged, and constantly exposed to cold and hardships. He had been employed in breaking stones on a road at fourpence per day, and out of this miserable pittance endeavoured to maintain a family. From repeated exposure to inclement weather he got a violent attack of pleuro-pneumonia, which being neglected at the commencement assumed an intractable character, and when he came into hospital the disease had been of several weeks' standing, his system reduced to the lowest state, and no sign whatever of reaction.

In estimating the danger of a patient labouring under pneumonia, I have told you that it is not so much in proportion to the extent of lung engaged as to the quickness of respiration, and the presence or absence of symptoms of asphyxia. You will see one man in pneumonia, having nearly the whole right or left lung inflamed and solidified, breathing easily with the other lung, and apparently suffering but little inconvenience; while you will find others, with a smaller amount of disease, exhibiting symptoms of distress bordering on asphyxia. I attended a young gentleman, eighteen months ago, who had complete carnification of the left lung, and pleuritic effusion on the same side, pushing the heart so far out of its place, that it could be felt pulsating under the right mamma. His illness lasted for nearly four months; yet the fluid was afterwards completely absorbed, the lung gradually assumed its natural condition, and he recovered perfectly. About six months ago I was again called to see him, and found that after exposure to cold he had got a violent attack of pneumonia in the right lung, which had run on to hepatisation, and on examining

him by the stethoscope and percussion, I found that almost the whole of the lung was solidified. In this case there was never anything like an approach to asphyxia; indeed, the distress of breathing was extremely slight, and he recovered completely in two months. This was rather a singular case; the patient one year getting violent pleuritis, followed by extensive effusion forcibly compressing the lung so as to render it quite useless, and pushing the heart out of its place; and the next year getting an attack of pneumonia in the other lung, ending in solidification of nearly the whole organ, and yet recovering completely from both. I need not say that there could have been no scrofulous taint in this gentleman's constitution, for if there had, the chances were that he would have sunk under either of these attacks. He lives at Crumlin; and in both instances his attending physician was Dr. Adams, of Stephen's Green.

In such a case as this the utility of the stethoscope was obvious: by its means we not only learned the nature and extent of the disease we had to combat, but also the exact situation where topical applications, such as leeches, blisters, setons, &c., should be applied with greatest advantage. I had lately an opportunity of witnessing an extremely interesting case of perfectly latent pleurisy. It was seen in the first instance by my friend and pupil Mr. B. Guinness. A fine young gentleman catching cold contracted some slight fever, apparently catarrhal, which altogether subsided in five or six days, but he remained very weak. I saw him on the tenth day;—a very slight cough remained, his breathing was regular, and he felt no want of breath; he had had no pain in the side from the commencement; he was weak and rather sleepless; otherwise he could specify no complaint. I do not know what induced me to percuss his chest—perhaps it was the force of habit; be this as it may, percussion led me to the discovery of extensive pleuritic effusion on the right side! He recovered perfectly under the use of proper remedies.

Let me now, gentlemen, direct your attention for a few moments to the case of M. Murphy, who died on Saturday last. This man, aged sixty, was admitted on 1st Nov. He had been ill for nine months before his admission, and stated that his illness originated in exposure to cold. It commenced with cough, oppression of chest, dyspnoea, and hæmoptysis. During the first month the hæmoptysis recurred frequently, and, as he thought, generally with more or less relief; but during the latter period of his illness it was entirely absent. On his admission he had well-marked hectic fever with copious puriform expectoration, and appeared very much emaciated. The right clavicle sounded pretty clear, but under the left clavicle there was well-marked dullness, with a full mucous râle approaching to gargouillement and pectoriloquy. The two latter symptoms became much more decided

in about a week after his admission, and I accordingly marked on his card "Phthisis Senilis." The only other circumstance connected with the history of his case which deserves attention was, that he laboured under constant costiveness, which continued up to the period of his death, his bowels never yielding except when he used purgative medicines.

It is unnecessary for me to enter into a detail of the remedies employed to alleviate his symptoms—the only duty which remains for the physician under such circumstances; I shall therefore content myself with noticing the phenomena observed on dissection, with one or two particulars which seem to demand a brief observation. You will recollect that this man exhibited, for several weeks before his death, unequivocal signs of a large cavity in the left lung, and that latterly the right lung also had become dull on percussion, and that the stethoscopic phenomena indicated the formation of a new cavity at its upper portion. Here are the lungs; the left, you perceive, is larger than the right, and exhibits a marked depression at its upper portion where the phthisical cavity is situated. You perceive, also, that the pleura investing it is very much thickened, and very rough on its surface; this appearance was in consequence of its intimate and universal adhesion to the corresponding pleura costalis, from which it was separated with considerable difficulty. You perceive that the right lung is rather smaller than the left; the left, being rendered more extensively solid by disease, has become incapable of collapsing after death to the same extent. We shall now make a section of the lung, to show the extent of the cavity. Here is the cavity: you perceive that it is nearly large enough to contain a small orange, and that its walls are lined with a firm semi-cartilaginous membrane. At the upper and internal part there is a small opening, which seems to be the commencement of a fistulous passage, a very common occurrence in cases of senilis phthisis; I shall introduce a probe and lay it open. Here is the track of this fistulous opening, and you perceive it terminates in one of the large ramifications of the left bronchus. You may perceive, also, that the section I have made displays masses of small granular tubercles in the upper and anterior portion of the lung, quite different in size and appearance from the large tubercles seen in the child and adult. I shall now make a section of the right lung. It is much more natural in its feel and appearance than the left, but still in all chronic cases of phthisis we seldom have the disease limited to a single lung. Here you perceive are a few patches of granular tubercles, looking as if they were infiltrated into the substance of the lung, and not surrounded as the large tubercles of the adult and child are by vascular condensed pulmonary tissue. Here, you see, I have cut into a small cavity; from its contents and appearance you can judge that it is of comparatively recent formation: it has no

semi-cartilaginous lining, and is of very inconsiderable size. You perceive, also, that it communicates freely with a pretty large sized bronchial tube, and contains a quantity of muco-purulent secretion.

With respect to the state of the viscera of the abdomen, I may observe that, with the exception of some portions of the intestinal tube, which I am about to show you, they presented nothing very remarkable. The liver and kidneys were found to be of the natural size, somewhat indurated, and very friable, and the spleen exhibited several small tubercular spots on its surface. Here are the stomach and duodenum, which you perceive retain their normal appearance; and the same remark is to be made of the colon and rectum. In the cæcum, however, which you see here, and here also in the ilium, there are several ulcerated patches of an oval form, and corresponding to the situation of the glands of Peyer. In some places you perceive the ulcers have destroyed not only the mucous membrane, but also the muscular coat of the intestine, and have very nearly produced perforation.

A most important inference may be drawn from this fact. Here we have several ulcers, destroying the mucous coat of the intestine, and eating their way through its muscular tissue, so that the only barrier left to prevent an effusion of the intestinal contents into the cavity of the peritoneum is a thin layer of serous membrane. Yet, during the whole time he remained in hospital, his bowels were so obstinately costive, that we were obliged to give him purgative medicine every second or third day to procure an evacuation. You would suppose, *à priori*, that a man in whom ulceration of the bowels existed would suffer considerably from pain, griping, and tympanitis, and that he would labour under the diarrhœa so frequently observed in the advanced stage of phthisis. Our predecessors entertained a notion that the diarrhœa of phthisis is a species of internal sweating; they observed that, when the patient ceased perspiring from the skin, he was generally attacked with a watery diarrhœa, and hence they termed the diarrhœa colliquative. Afterwards it was found, on numerous examinations, that where this diarrhœa had existed, there was in most cases ulceration of the bowels; hence pathologists began to believe that this ulceration had a great deal to do with the intestinal symptoms observed towards the termination of phthisis, referring to it the abdominal pain and tenderness, the unmanageable character of the diarrhœa, and the aggravation of the hectic symptoms.

Now it strikes me that this mode of accounting for these symptoms was, perhaps, too hastily adopted. No doubt ulceration of the bowels may produce all the symptoms detailed: but, on the other hand, it may exist to a very remarkable extent, and yet produce no symptoms by which it could be recognised.

Here was a patient who never had the slightest tendency to diarrhoea, who never complained of pain, griping, flatulence, or abdominal tenderness; on the contrary, his bowels were not merely slow, but even confirmedly costive, and he always felt more or less relief from the use of purgative medicine. None of us ever suspected that anything like ulceration existed; we gave him a full dose of castor oil every second day, which produced one rather scanty evacuation, and yet when we come to examine his intestines we find numerous patches of ulceration. This case is calculated to make a deep impression on every reflecting mind; in a practical point of view it is of great importance. If the scrofulous disease had in this case been entirely limited to the bowels, and had not touched the lung, the great probability is that it would have been almost wholly latent; that the man would have taken no notice of it, would have thought himself well, and eaten, drunk, and worked as usual; that the disease would have gone on stealthily committing its ravages, and that one of the first symptoms of danger would have been the occurrence of perforation, followed by universal and fatal peritonitis. The question would then be as to the cause of death. The pathologist would open the body, and find at once that the cause of the whole mischief was ulceration of the intestines; but he would be mortified to think that the work of destruction had gone on silently and unobserved, and that it could not be recognised until a new disease appeared, under which the patient sunk. I have read of more than one case in which a person killed by accident was found to have large ulcerated patches in the ilium, and yet had not been known during life to complain of any intestinal symptoms. In one case, a strong and apparently healthy Lascar, who had eaten heartily an hour before he was killed, and whose digestion was, according to his friends' account, unaffected by any morbid derangement, presented on examination a number of deep ulcers in the ilium, which would in all probability have ended in perforation and peritonitis in the course of a few days.

At the conclusion of this lecture I intend to speak of hoarseness and chronic laryngitis, and shall most probably return to this interesting topic again. At present I shall detain you for a few moments with a brief outline of a case of total loss of voice, which I have recently witnessed, and which is in itself so singular, that I make no apology for giving it.

Before I mention this case, allow me to observe, that loss of speech arises sometimes from lesions of apparently a very trifling character. A person may totally lose his speech without any previously existing or premonitory symptoms indicative of nervous lesion, without having experienced any sensation of pain or vertigo, any noise in the ears, any indications of determination to the head,—in fact, without

anything to show that the aphonia was connected with any particular state of the brain. Thus, a barrister, whom I attended with Dr. Beatty, was walking up and down the hall of the Four Courts, waiting for a cause to come on, and chatting with one friend and another; as the hall was rather crowded and hot, he went out into the area of the courts for the sake of the air, and had not remained there more than ten minutes, when an old friend from the country came up and spoke to him. He was pleased to see his friend, and wished to inquire about his family, when he found to his great surprise that he could not utter a single audible sound; he had completely lost his voice. He recovered the use of his tongue in about three weeks, but not completely, for some slowness of speech remained. When the loss of speech was first perceived his friend brought him home in a carriage, and during the day he had several attacks of vertigo, and afterwards hemiplegia. For several hours, however, before distortion of the face or any of the usual symptoms of paralysis had commenced, the only existing symptom was loss of speech. This gentleman died of apoplexy in about two months.

In many cases of paralysis, you will find that although the patients have lost the power of utterance, yet the motions of the tongue appear to be nowise deranged. In the majority of cases it can be shortened, elongated, raised, depressed, or moved from side to side with as much apparent facility as in a state of health, and yet the voice is in some instances very much impaired, in others totally lost. In such cases it would appear that the defect lies in the glottis, which forms and modulates the voice, and not in the tongue or lips which divide and articulate it. Indeed this is evident to any one who observes the interrupted and spasmodic efforts which paralytic persons make when speaking; they are, in fact, all stutterers.

But to return to the case to which I have alluded. A young gentleman of delicate constitution, and who is now about sixteen years of age, continued to enjoy tolerably good health up to his sixth year. When about six years of age, he went to bed one night in health and without any unusual symptom, but, on getting up in the morning, it was observed that he had lost his speech, and was unable to articulate a single word. His family became alarmed, and sent for a physician immediately; the boy got some internal medicine and a stimulant gargle, and recovered his speech in a few days, without the occurrence of any symptom of laryngeal inflammation or cerebral disease. But what was remarkable in the case was this:—the boy, who up to this period had spoken well and distinctly, now got a terrible stutter. This resisted all kinds of treatment, and for ten years he continued to stammer in the most distressing way, and was so annoyed by it himself, that when a boy he used to stamp on the ground with vexation whenever he failed in uttering what he wished to express. In

the month of May last he got an attack of chronic laryngitis of a scrofulous character, and evidently the precursor of phthisis. Indeed he is at present labouring under phthisis; Dr. Stokes and I have examined him, and we feel convinced that tubercular deposition is going on in the lungs. But what is most curious in the case is this—after he got the laryngitis, a very peculiar change took place; the laryngeal inflammation modified the tone of his voice so as to make it a little husky, but the *stammering has completely ceased*.

You are aware that stammering has been explained as depending on spasm of the muscles which are employed in modifying the column of air as it rushes through the narrow aperture of the glottis. At certain times, and under a variety of circumstances, those fine muscular organs become spasmodically affected, the vocal chords no longer undergo the same steady and exact tension and relaxation, and speech becomes interrupted in consequence of frequently recurring closure of the glottis. With respect to this disease, I would beg leave to refer you to a very excellent chapter in Dr. Arnott's work on the Elements of Physic, vol. i., p. 614.

In the case to which I have referred, inflammation taking place in the mucous membrane covering these delicate muscular fibres, you can conceive that either the thickening of the mucous membrane, or the alteration in the state of its vitality, may have so modified the disposition of the parts, that they become incapable or indisposed to undergo those rapid contractions necessary to produce stammering, by inducing closure of the glottis at the moment that its aperture ought to remain open. The case itself, however, is an extremely curious one, and I do not believe that there is any similar one on record. Every thing which bears on the cure of so important a disease as stammering, even though it be accidental, and not the result of medical care and ingenuity, is of great value, inasmuch as it tends to place the causes of the disease in a clearer light. In this point of view I look upon the case as one of very great interest.

I shall conclude this lecture with a few detached observations on hoarseness or loss of voice, from sore throat or slight laryngeal inflammation, a form of disease which is now very prevalent.

A form of hoarseness is frequently observed in growing boys or girls, which assumes a very chronic character, and often resists for a long time almost every form of treatment. A boy gets cold followed by sore throat and feverish symptoms, which may last for a few days, and then disappear under the use of aperient medicines, or perhaps without any interference on the part of the parents or the physician. The feverishness and soreness of throat subside, but the hoarseness remains, and the boy can speak only in whispers. This condition may last for weeks and even months without any other symptom whatever; the

patient has no cough or difficulty of breathing, his appetite is good, sleep and digestion natural, and there is no appearance of emaciation. The only thing amiss with him is the impairment of voice, and this continues so long that it gives rise to a considerable degree of anxiety on the part of his parents. When you examine the fauces you find no appearance of inflammation in the mucous membrane, and there is no superficial or deep-seated tenderness in the region of the larynx. How are you to treat this form of disease? It depends on a relaxed and weakened state of the chordæ vocales, and perhaps the muscles of the larynx, the result of inflammation of an exceedingly chronic character, and will not be benefited by leeches, or antiphlogistics, or low diet. The best thing you can do in such a case is to have recourse to the use of strong stimulant gargles. You begin with a drachm of the tincture of capsicum in six ounces of decoction of bark, which is to be used five or six times a day. After some time you can increase the quantity of tincture of capsicum, but you never need go farther than half an ounce in a six ounce mixture. In the next place, you will have recourse to frictions over the region of the larynx and external fauces with croton oil, which is much better adapted for such cases than tartar emetic ointment. The eruption produced by tartar emetic ointment is productive of a great deal of annoyance, and when the pustules break they prevent the boy from wearing his neckcloth. All the purposes of a counter-irritant are quite as well fulfilled by croton oil, and with much less inconvenience. The best form for using it is the following:—

R. Liniment: camphoræ comp. ℥j.
Olei crotonis tiglij, ℥xx.

Of this mixture a small quantity, say a couple of drachms, should be poured into a saucer and rubbed over the fore part of the neck night and morning, until a full crop of pimples appears. When these have dried up and desquamated, it should be again applied, and in this way a mild and manageable, but very effectual degree of counter-irritation, can be kept up for any length of time. In addition to these measures (should the disease continue), I would strongly recommend small doses of iodine and change of air. I have been induced to give iodine in such cases from observing that inflammation of a chronic character seems to have many points of resemblance to that which arises from scrofula. The last thing which I have to observe on this form of hoarseness is, that you should, particularly in the beginning, insist on the observance of strict silence, a point which is said to be exceedingly hard to be attained where the patient happens to be a female. In some cases all these means fail and then something more energetic must be attempted. The inhalation of the vapour arising from tincture of iodine and tincture of conium added to hot water in a

proper apparatus has proved useful to some, but in all obstinate cases the sheet anchor is mercury exhibited internally, and by means of inhaling the fumes of hydrargyrum cum creta. In general it is necessary to continue the mercurials until the mouth is slightly touched, when the hoarseness will be found to yield. It is obvious that before we employ mercury in a case of chronic hoarseness, we must feel well assured that we have not to deal with a hoarseness arising from a phthisical tendency, for in this case mercury would prove injurious to the constitution. In such cases the stethoscope and percussion often afford valuable assistance, by showing that although the patient has had a hoarseness and cough for weeks or even months, yet there are no symptoms of tubercular development in the lungs. The cough is only the result of laryngeal inflammation or irritation, the submaxillary glands, and the amygdalæ are often slightly enlarged, the fauces are red, and the back of the pharynx is covered with irregular superficial excoriations. Connected with the subject of sore throat is the discovery lately announced by Velpeau, of the use of alum in powder in acute cynanche tonsillaris. He states that this powder applied by means of the finger to the fauces and inflamed parts exercises a wonderful effect. The symptoms, says Velpeau, are stopped as if by enchantment, the fever diminishes, the redness and tumefaction of the inflamed parts subside, the appetite returns, and convalescence is speedily established. This application is successful at any period before suppuration has been established. Alum has long since been applied in substance to the throat in cases of angina maligna, and in chronic sore throat, but before Velpeau no practitioner ever dreamed of making use of alum as a local application during the first stages of acute cynanche tonsillaris. By the way, this use of alum is calculated to throw some light on the good effects which this substance exerts when taken in large doses in cases of violent pain in the stomach arising from indigestion, recommended by Dr. Griffin of Limerick.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOUCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXIII.

Dystocia—Inversion—Placenta Incarcerata.

GENTLEMEN—At my last lecture I described to you the symptoms and treatment of uterine hæmorrhage after birth of the child, and endeavoured to impress upon you the extreme

importance of an accurate acquaintance with this subject. I may, perhaps, have made it rather more concise than you might have expected; but my object was to render it as simple and intelligible to you as possible. There are two other affections belonging to this species of dystocia, to the consideration of which I shall devote the present lecture.

The relaxed and flaccid uterus may become *inverted and prolapsed* after labour, especially where the patient has been placed in an unfavourable position at the moment of the child's birth. If the fundus only be inverted, and the body of the uterus still remain above the os uteri, it is called *partial inversion*: if, on the other hand, the body of the uterus, as well as the fundus, have passed through the os uteri, the whole organ is turned inside out, and forms *complete inversion*.

Inversion of the uterus may be produced in cases where premature attempts have been made to extract the placenta, or where the cord has been pulled at with too much violence. Inversion following delivery is not always, however, owing to unskilfulness, for sometimes it will happen in spite of every attempt on the part of the accoucheur to prevent it; as, for instance, where the pains are very powerful, or where the patient exerts herself with too much violence: it may also be inverted where the cord is coiled round the child's neck, or is unusually short. This last circumstance, however, does not always act as a cause of inversion, for I have known of several cases where the patient had been suddenly surprised by a violent pain, the child forcibly expelled and thrown upon the floor, and the cord broken; but inversion never followed. In all cases of sudden and forcible expulsion of the child, the uterus cannot contract itself immediately, and hence is peculiarly liable at this moment to inversion: the wonder is, that it does not happen more frequently.

In cases of incomplete, or *partial inversion* of the uterus, we are led to distinguish the disease by the absence of the hard spherical tumour above the pubes, which the fundus forms when properly contracted, and by the presence of a globular fleshy body in the os uteri, which is sensible to the touch. This tumour will be found to be broader at the base than at its extremity, and surrounded by the os and cervix uteri, forming as it were a tight ring round it. The patient complains of a sense of dragging amounting to severe pains in the groins and lumbar region, and a tenesmus, which, compelling her to strain violently, often forces the uterus further down, and sometimes brings on complete inversion. A hæmorrhage more or less profuse accompanies it. In this form the pain will be more acute than in the complete inversion, and the hæmorrhage more considerable. The patient suffers under an oppressive sense of sinking, which is frequently followed by cold sweats and convulsions. The reason (as Dr. Dewees justly observes) why partial inversion of the uterus is attended with

a more serious loss of blood than in the complete species, is, that in the latter the uterus contracts to a certain extent, which it is prevented from doing in the other case.

The symptoms of *complete inversion* are quite obvious, because the fundus protrudes between the labia, in the form of a large fleshy ball. If the placenta be not separated, no hæmorrhage of course can occur; but if you attempt to remove it, the case may become dangerous from hæmorrhage, or from the irritation, producing inflammation of the uterus, and even fatal mischief. Death may also follow from the sudden emptying of the abdominal cavity and rapid flux of blood from the heart and other central parts, producing fatal syncope, or from the sudden shock which the nervous system sustains: hence inversion of the uterus, coming on immediately after delivery is one of the most dangerous affections which we have to deal with. In actual inversion we must try to return the uterus as quickly as possible; and this is not difficult if done immediately. From the contraction of the os uteri, it soon becomes almost impossible to reduce it, and "the impossibility (as Dr. Denman observes) of replacing it, if not done soon after the accident, has been proved in several cases to which I have been called so early as within four hours, and the difficulty will be increased at the expiration of a longer time." If the placenta be not yet separated, the question arises whether we should separate it or not before reducing the tumour. If it be completely attached to the uterus, we should return the fundus, if possible, *with* the placenta: the separation of the placenta will produce hæmorrhage, and, being of itself a stimulus, it only excites the uterus to contract the more; besides this, we are losing time, which is of the greatest value.

"In replacing the uterus," says Mr. Burns, "we should keep our hand in the cavity to excite contraction: if the placenta adhere, it must not be pulled off, but carried back into the uterus, which is rather to be excited to *throw* it off." In order to reduce an inverted uterus with the greatest facility, the patient must lie in the supine posture, with the pelvis somewhat elevated and knees drawn up. The operator, with his hand smeared on the outside with pomade or hog's lard, &c., and the fingers contracted into the form of a cone, directs it against the fundus, which he presses back in the axis of the inferior aperture of the pelvis, and then gradually brings it over the superior edge of the symphysis pubis; nor must he venture to withdraw his hand, until the uterus has contracted itself upon it. Leroux considers the application of a cloth to the fundus of the inverted uterus of great utility; "the force," he says, "is thus more equally divided, being applied to a larger surface." After the operation, the greatest possible quiet must be insisted upon, the patient must avoid all coughing, sneezing, &c., and should now lie upon her left side.

Where the uterus resists all our attempts at reduction, it will be worth while trying a plan which was put in practice by the late Mr. White, of Manchester, with complete success. He was called to a case of nearly complete inversion, about an hour after it had happened. Finding that his attempts to reduce it in the usual way were attended with great pain, brought on violent straining, and were accompanied with much loss of blood, he desisted for a time, from an apprehension that she would die under his hands. "Upon further consideration of her case," says Mr. White, "I was of opinion that the body of the uterus was too large to pass through its neck, which was a little contracted; therefore in a few minutes after she had taken the opium and vitriolic drops, without waiting for their effects, I hastened to reduce it by the following mode of practice which I believe to be entirely new, and which had never before occurred to me. I grasped the body of it in my hand, and held it there for some time, in order to lessen its bulk by compression; as I very soon perceived that it began to diminish I persevered, and soon after made another attempt to reduce it by thrusting at its fundus; it began to give way. I continued to force it until I had perfectly returned it, and had insinuated my hand into its body. It was no sooner reduced than the pulse at her wrist began to beat. She recovered as fast as we could wish." In some cases, however, the os uteri is so firmly and rigidly contracted that it is impossible to restore the fundus to its natural position, although the uterus be only partially inverted. "When this happens, the stricture is so firm and resisting, that a finger cannot be placed between its edge and the confined uterus; here," says Dr. Dewees, "we believe it impossible to pass the fundus as the constriction will not yield. This variety of partial inversion produces the most terrible and alarming symptoms imaginable; pain, faintness, vomiting, delirium, cold sweats, extinct pulse, and, if not speedily relieved, death. Under such sufferings, where all chance of restoration is at an end, we have advised, with a view to terminate such severity of suffering, and to preserve life, the drawing down of the fundus so as to complete the inversion." I should advise you, gentlemen, to read Case II., which Dr. Dewees has given in his "Compendious System of Midwifery," for it is a very instructive one. We must be very cautious not to confound inversion with polypus uteri. The appearance of a tumour in the os uteri immediately after labour is no peculiar symptom of inversion, for a polypus which had been kept up by the presence of the child may now come down, and be discovered for the first time. Professor Naegele informed me of a case of this kind which had occurred to him at Mannheim. After the expulsion of the child he felt a large tumour presenting, and at first considered it to be inversion of the uterus, but upon more careful examination he found it to

be a polypus, which was afterwards successfully removed by ligature. The want of sensibility cannot quite be depended upon as a diagnostic of polypus from inversion, for in cases where the inverted fundus has been for some time tightly girt by the contracted os uteri, it becomes nearly or quite insensible. Every midwife should be able to distinguish, and immediately return, an inverted uterus, because, if done at once, it is by no means difficult. When the fundus has partly passed through the os uteri, and this contracts, so that we cannot reduce it, it may happen that the uterus does not inflame, and the disease becomes chronic. A chief symptom of this state is the appearance of a profuse hæmorrhage at every menstrual period, or a constant fluor albus, which gradually exhausts the patient. In trying to reduce a case of this sort, we must premise bleeding to fainting, if the patient can bear it, together with the warm-bath, &c.; in this manner we shall frequently succeed where all other attempts have failed: if, however, it be of very long standing, the ligature is the only means of cure. An interesting case of chronic inversion thus treated is recorded in the *Med. Chir. Trans.*, vol 10, and a similar one in the *Dublin Hospital Reports*, by Dr. Johnson.

The last subject which I have to consider under this species of dystocia, is where the os and fundus uteri are flaccid and dilated, and the body of it contracted into a stricture, retaining the placenta above it, whether it be still adhering or detached; it forms that condition of the uterus known by the name of *placenta incarcerata*, or *hour-glass contraction*. On examining externally through the parietes of the abdomen, we find the fundus uteri higher than usual, having, as it were, an empty space between it and the pubes; internally the os uteri is found soft, yielding, and uncontracted; on running the finger along the cord, it seems to pass, as it were, through a hole in the uterus. The stricture has occasionally been observed to be on one side, and most frequently on the right; an instance of this kind is mentioned by Levret, in his *Suite des Obs.*, &c., and also by Stein, in the second part of his posthumous works; this form of it, however, is very rarely observed.

This faulty condition of the uterus consists in an unequal contraction of its fibres. The remote cause is very obscure; by some it is attributed to too intimate adhesion of the placenta to the uterus. This is seldom or never the case with the whole extent of the after-birth, but merely partially, in spots the size of half-a-crown or less. This state is said to induce hour-glass contraction, by preventing the uterus from contracting where the adhesion is, and thus making the whole organ contract unequally. But this cannot always be the case, for the placenta is sometimes quite detached, and lies loosely above the stricture.

Ruysch, Stein, and Røederer, in his *Elementa*

Artis Obstet., and also Leroux, were of opinion that this affection arose from the placenta being implanted on one side of the uterus; but this is certainly not the case, because, as you well know, the placenta is as often situated to one side as not, in the most perfectly natural labours. Baudelocque says that after labour the disposition to contract is most powerful in the os uteri internum, "That circle of the uterus," he observes, "which is round the child's neck, according to the general laws of its contraction, must narrow itself much quicker after delivery than the other circles which compose that organ, because it is already narrower, and its forced dilatation at the instant of the expulsion of the child's trunk is only momentary, and because it has naturally more tendency to close than the other circles have, since it is that which constitutes the neck of the uterus in its natural state." The fact is, that in this condition of the uterus we find the portio vaginalis tapering gradually like a funnel until we reach the os uteri internum, which is considerably contracted. This is what in reality forms the stricture, and Baudelocque declares that he never yet met with a case where it was formed by the body of the uterus. This was also the opinion of Dr. Douglas. Schmitt, in his *Treatise on Inversion of the Uterus*, denies the existence of hour-glass contraction altogether, and says that it is the os uteri *externum* which forms the stricture, and that it is a deception where we suppose the hand to have been in the cavity of the uterus, before it had even passed the os uteri. Perhaps this is going too far, but, from the cases which I have met with, I have every reason to think Baudelocque's view a correct one.

Where this affection has been most commonly observed has been after very rapid or very tedious labours, where artificial means have been used, or where the labour has been forcibly or roughly terminated; where the uterus has been much distended by the presence of twins, or by an unusual quantity of liquor amnii; irritation of the os uteri, introduction of instruments or the hand when cold, pulling at the cord, &c., have also been said to induce this affection. "Retention of the placenta from stricture of the uterus," says Mr. Burns, "is almost uniformly produced by hurrying the delivery of the child, or promoting its being rapidly expelled."

The danger depends chiefly on the hæmorrhage. If no hæmorrhage be present, we may treat the case as purely spasmodic, with frictions and warm fomentations, opium, and complete quiet. If, however, hæmorrhage supervene, it denotes considerable danger. The internal use of *secale cornutum* or tinct. *cinnamomi*, sprinkling cold water upon the abdomen, &c., are indicated; in fact, precisely the same treatment which I directed for hæmorrhage from an uncontracted uterus. If this plan does not succeed, we must introduce our hand, in order to separate the placenta,

and in doing this we shall usually find a partial adhesion of it to the uterus. One finger after the other must be gradually passed through the stricture, in order to dilate it, and as soon as the placenta is separated and brought away the hæmorrhage will cease. In a midwifery journal, conducted by the late Professor Stark, of Jena, there are three cases of twin births recorded, each of which was followed by this affection. The diagnosis as to precisely what portion of the uterus forms the stricture is very difficult, and we are very liable to be deceived. I once accompanied my excellent friend, Professor Nægele, to a private case of this kind. The accoucheur, who had sent for him, and who understood his profession well, assured us that it was incarcerated placenta. Professor Nægele examined and found the os uteri externum open, and the neck gradually tapering until it reached the os uteri internum, which was contracted. On passing the stricture he found considerable adhesions of the placenta. What is the nature of these adhesions?—This is a question which I fear I cannot answer: it is said that they are produced by an inflammatory action in portions of the uterus or placenta, thus producing a complete union. Further observations are required to confirm this fact.

Retention of the placenta, however, cannot only become dangerous from hæmorrhage. Is it possible that the placenta may be retained for a length of time in the uterus without doing mischief, as Von Froriep and Von Siebold have asserted, when they recommended that the placenta should be left to be expelled by the natural powers? When the placenta has been retained in the uterus for twelve hours, the fluid which is discharged begins to emit an offensive smell, and the placenta passes rapidly into putrefaction. The pulse becomes quick, sharp, and small, with other symptoms of fever; the strength sinks rapidly, and the patient dies on the second or third day in full possession of her mental faculties. The ganglionic system seems here to be chiefly affected, just as we see in cases of strangulated hernia, nor is it necessary to explain the rapid dissolution from the absorption of the putrid fluid merely exciting fever and inflammation. It exerts a deadly influence upon the nervous system; hence we can explain the great prostration of strength; we can explain why the uterus loses its tenderness before death, and why the patient expires in a state of perfect consciousness. In cases of this sort we must wash out the uterus from time to time with tepid water, and put in force that treatment which I shall shortly describe to you, when I come to the subject of puerperal fever. A little chloride of lime or soda may be occasionally added to the injection with advantage, to remove the fœtor of the discharge. As long as no external air comes in contact with the part no putrefaction takes place, and this is more likely to be the case the closer the uterus is contracted upon the placenta. Under these

circumstances, when the access of external air is prevented, and no putrefaction takes place, what becomes of the placenta? You will be, perhaps, surprised to hear me assert, that *it is absorbed!* This is a fact which, although it has lately attracted the attention of several eminent practitioners on the Continent, has received little or no notice in this country. That it does occur I have no doubt whatever, having witnessed several remarkable instances of it myself.

It not unfrequently happens, that in abortion the fœtus is expelled and the secundines remain for some time longer in the uterus; and instances have occasionally been known where these have not appeared at all, and where, from the attention which was paid to the patient, they could not possibly have escaped unknown to the practitioner. After a time the menses have returned, but nothing ever appeared of the placenta.

I have had cases where the placenta has required to be artificially separated on account of adhesions to the uterus, and where I have been perfectly certain of portions having been left behind adherent to the uterus, and yet they have never been discharged, nor has any trace of them appeared afterwards; the patient has recovered her health; after a time has again become pregnant, and her labour has passed over quite favourably.

In a case of retention of the placenta, which I saw with Professor Nægele, where he had to introduce his hand to separate it from the uterus, in doing which he experienced great difficulty from the obstinate and unruly behaviour of the patient, and also from the unusually strong adhesion, it was evident that at least a third of the placenta was left behind. The napkins which came from the patient were carefully examined, but not a trace of placenta ever appeared, but little discharge followed, and the menses returned thirteen weeks after.

Dr. Young of Edinburgh gives an interesting case of this sort, where he could not bring away the placenta. The patient had been delivered two hours, and the cord was broken. "I laid the woman," says Dr. Young, "upon her side and introduced my hand, but could not get hold of the placenta. I could get my hand to the placenta, but no further, the uterus having formed a kind of sac or pouch for it, so that at last I was obliged to trust to nature. *What was very remarkable, the placenta never came away, and yet the woman recovered.*" In my Midwifery Reports (*Med. Gaz.* May 31, 1834), you will find an interesting case of this, where a very considerable portion of the placenta was left, and which never appeared. A similar case has been recorded by Prof. Salomon of Leyden, where the whole placenta was absorbed, and where the patient was so carefully watched as to preclude all possibility of its having escaped without being noticed. I should recommend you to read the case, which I have recorded

in the *Gazette*, and also the observations appended thereto.

In abortion of the first months, the danger from retention of the secundines depends upon the hæmorrhage, not on the effects which they produce from becoming putrid. At this period of pregnancy their bulk is too small to do much injury, but the hæmorrhage of an abortion at the end of three months may easily become fatal to the mother until the fifth month, when danger will also arise from the effects of the retained secundines becoming putrid.

Where the uterus has contracted so closely upon the placenta as to prevent all access of external air, pieces of placenta have been expelled, after a lapse of several days, quite fresh, and with all the appearance of having been, as it were, dissolved upon the outside, the edges having been rounded off by the action of absorption: hence it is not always necessary that the placenta should become putrid, if retained beyond a certain time in the uterus. Thus Dr. Denman mentions a case where the whole of the placenta was retained till the fifteenth day after the birth of the child, and then expelled with little signs of putrefaction, except upon the membranes, the whole surface which had adhered exhibiting marks of fresh separation.

When we consider the abundant manner in which the uterus is supplied with lymphatics and when, as I shall shortly have occasion to point out to you, we find that absorption of putrid lochia and discharge from the uterus is a frequent cause of puerperal fever, and when we consider the remarkable changes which take place in fetuses which have been retained in the uterus for some time after their death, and in polypi when detached by means of the ligature, &c., I think there cannot be any doubt of the uterus possessing this power in a considerable degree. I should have entered more fully upon the absorbing powers of the uterus, for it is a highly interesting subject; but I find the hour is elapsed, and there are still so many subjects to discuss, that I shall not be able to resume it at our next meeting.

ON THE PREPARATIONS OF OPIUM USED IN FRANCE.

BY M. LECANU.

FOLLOWING the example of some pharmacologists, who unfortunately have not been imitated as often as they should have been, M. Soubéiran has lately made many valuable experiments on several of our pharmaceutic preparations, more especially those of aconite, sarsaparilla, and rhatany. It must be confessed, that the results which have been deduced from the analysis of medicinal substances have been occasionally denied; thus, M. Caventou is of opinion, that the experiments of

Hancock and some other foreign chemists do not so incontrovertibly prove the volatility, or at least the speedy alteration, of the active principle of the sarsaparilla by heat, that we should abandon the use of the syrup prepared by long decoction; and, on the other hand, M. Polydore Boullay has very judiciously observed, that if the analyses of Bucholz and Braconnot would induce us to consider the extract of aconite prepared in the ordinary manner inert, the more recent analyses published in Germany by Geiger and Hesse would lead us to consider it as a most powerful medicine, inasmuch as, setting aside the volatile principle of Bucholz and Braconnot, the aconitum contains a fixed active principle—the aconitine. But, whatever importance may be attached to these objections, the researches to which they apply must still appear of incontestable utility to all.

Therefore, as in the actual condition of organic chemistry there is real danger, it appears to me, in trusting to the data which it furnishes, to reject processes as imperfect which may one day originate ulterior discoveries, and thereupon adopting new formulæ and new modes of operating, I must persist in thinking, that every labour which tends to make a wise application of the data of analysis to the preparations which are constantly furnished by empiricism, must necessarily tend to the advancement of the pharmaceutic art.

With this impression I undertook the examination of the various preparations of opium in a theoretical point of view, choosing that medicine as the subject of my experiments, for many reasons; because opium is one of those medicines the actual composition of which is best known, and therefore the consequences to be drawn from the result of analysis would be rendered more assured; and because the opinion that has been formed concerning the nature of its active principles having varied at different periods, there will be a better opportunity to point out the dangers that will be incurred by considering the ideas of the moment as definitive; and, finally, because the examination of the preparations of opium will furnish me more frequently than any other with opportunities of pointing out, to the gratitude of chemists, names which have, and still continue to, shed great splendour on our honourable profession.

I shall commence by showing how much opinions have varied at different periods relative to the chemical composition of opium, and how much its employment in the treatment of disease has been influenced by that change.

The first opinion, which was maintained for a long period, was, that the action exerted by opium on the animal economy depended entirely on the presence of volatile principles. Hence the employment of the so-much-wanted distilled water of opium, of the alcoholate of opium, and of the extract of opium prepared by maceration with a little water, and concentrated in a marine bath.

Fresh observations having induced practitioners to consider that it was possible to deprive opium of its narcotic powers, and to render it simply anodyne, they were led to admit the existence of several active principles in this substance, some of which, being volatile, are the cause of narcotic action,—others, being fixed principles, the cause of its anodyne influence. Hence the torrefaction of opium, the addition of aromatics in order to disengage, or at least to neutralise, the narcotic principles; hence, also, the preparation of the extract of opium by decoction and prolonged digestion, according to the methods of Hombert, Diest, and Baumé: by fermentation, according to the method of Deyeux: and by fermentation in the juice of quinces, according to the method of Langelot. The principal object of all these processes is evidently to separate or change the volatile narcotic principles, and to preserve in the extract only the fixed anodyne principles of the opium.

At a later period, about 1804, when Derosne and Seguin had shown the existence of a peculiar matter in opium which was capable of exerting a marked influence on the animal economy, although it did not then appear that the crystalline matter of Derosne differed essentially from that of Seguin, it was considered, whatever it might be, as the active principle of opium; and on the supposition that the preparations of opium would be rendered more active by containing a larger quantity of this principle, the experiments of chemists were directed to preserve it in the extract, and to separate the resinous matter which was present with it.

The process of the Batavian Pharmacopœia, which consists in treating opium with twice its weight of cold alcohol, drying the residuum, dissolving it in water, and collecting and evaporating the aqueous solution; and that of M. Limousin Lamothe, a valuable modification of the more ancient one of Josse, in which the opium is beaten up with a certain quantity of pitch-resin, before boiling it in water, after which the cooled solution of opium is separated by means of the filter from the resin, were both intended to remove the resin from the opium, in the one instance, by dissolving it in alcohol, in the other, by causing it so to combine with the pitch-resin as to prevent its solution by the water.

Finally, some years afterwards, in 1817, M. Robiquet, in resuming, with the view of perfecting them, the experiments of Sertuerner on opium, proved, contrary to the opinion of the celebrated German chemist, that if the crystalline matter of Seguin is a real organic salifiable base, existing in opium, intimately united with meconic acid, the crystalline matter of Derosne is not a sub-meconate, but a distinct peculiar matter pre-existing conjointly with the meconate acid; and, on the other hand, Orfila and Magendie having ascertained by numerous experiments that the salt of Derosne (narcotine), and that of Seguin (mor-

phine), possessed peculiar physiological properties, without attaching greater importance to its volatile principles than had been done for many years, it was considered there would be considerable advantage in having a preparation of opium deprived of one of these salts. The processes of Robiquet and Dublanc, which are based on the property possessed by æther of dissolving the narcotine without affecting the meconate of morphia, were proposed

Thus the volatile principles of opium, at first in full possession of the esteem of physicians and pharmacologists, afterwards divided it with the fixed alkalies, and finally ceded it entirely to narcotine and morphia.

Since 1817, the opinion which had been formed of the composition of opium, and of the therapeutic influence exerted by each of its constituents, has remained unchanged. Thus in a valuable thesis on the preparations of opium, supported in the year 1821 at the Ecole de Pharmacie, by M. Decourdemanche, the author was of opinion that the relative medical value of these preparations might be judged by the quantity of narcotine and morphia which they contained. But we can no longer consider narcotine and the meconate acid of morphia as the sole causes of the action of opium on the animal economy, since it has been proved to contain volatile principles, and more especially since the discovery of codeine by M. Robiquet, of narceine by M. Pelletier, and of meconine by Messrs. Dublanc, jun., and Couërbe. I shall now, then, after giving the chemical composition of opium according to the latest authorities, point out those of its preparations which are most frequently employed, and endeavour to determine, *à priori*, in accord with their known properties, which of the constituent principles of opium ought to enter into their composition, and, on the other hand, indicate those which the chemical processes ought to eliminate or merely modify.

The constituent principles of opium, as at present known, are,—

- 1st. The narcotine of Derosne and Robiquet.
- 2nd. The meconate acid of Seguin and Sertuerner.
- 3rd. The meconate acid of codeine of Robiquet.
- 4th. The narceine of Pelletier.
- 5th. The meconine of Dublanc, jun., and Couërbe.
- 6th. The caoutchouc of Robiquet.
- 7th. The bassorine of Pelletier.
- 8th. The sulphate of morphia of Dupuy.
- 9th. The sulphate of lime } of Derosne.
- 10th. The sulphate of potass }
- 11th. Volatile matter }
- 12th. Resinous matter } of the ancients.
- 13th. Gummy matter }
- 14th. The fatty matter in which Pelletier has discovered acid properties.
- 15th. Lignine.

In regard to the preparations of opium those most in use are

The powder.

The alcoholic tincture.

The liquid laudanum of Sydenham.

The liquid laudanum of Rousseau.

The distilled water of opium.

The extracts.

The syrups may be passed by, as they are, in fact, merely an aqueous solution of an aqueous extract.

Of the Powder.

It must be evident that powdered opium will contain all its principles, and such as they are in the substance itself. The volatile principle will be found in greater proportion the more freshly the powder has been prepared, the lower the temperature was at which the opium was dried, and the better the bottle was corked. This ought to be borne in mind when opium is powdered, as the powder ought to be opium merely brought into a convenient form for division.

Of the Alcoholic Tincture.

The alcoholic tincture, which is prepared according to the pharmacopœia with the aqueous extract, the composition of which we shall point out afterwards, ought to contain all those principles of the extract which are soluble in alcohol at 22°. I may even say that it then contains all, since it is certain that the extract, when properly prepared, dissolves without residuum in alcohol of that strength. The result will not be always the same if the alcohol which is used, as it is ordered in some of our foreign pharmacopœias, vary in strength; in that case some of the constituents, soluble in alcohol at 22°, would be either partially or totally eliminated. If the spirit were very concentrated, the gummy matter with the sulphates of lime and potash would be excluded; on the other hand, were it too dilute, the resinous, fatty, acid, and volatile matters, and perhaps even the narcotine, would remain undissolved.

Alcohol does not appear to exert any reaction on the principles of opium, and as the extract of opium fully dissolves in the spirit at 22°, the tincture can be nothing else than a simple alcoholic aqueous solution of all the principles retained in the extract.

Sydenham's Laudanum.

The laudanum of Sydenham is prepared by macerating opium, cloves, canella, and saffron, in Malaga wine, and in this the wine will dissolve all the principles of opium which are soluble in weak spirit; we have, doubtless, therefore,

The meconate acid of morphia,

The meconate acid of codeine,

Meconine,

Narcéine,

Sulphate of morphia, and

Sulphate of potass,

contained in the preparation, to the partial exclusion of the resinous, volatile, and fatty matter, and also of the narcotine, which is scarcely, if at all, soluble in weak spirit, and to the total exclusion of the bassorine and caoutchouc, which are insoluble in alcohol and in water; but there cannot be any certainty on this point, until the analysis of the liquid and the residua has been made, for the Malaga wine is not a mere mixture of spirit and water. In the ordinary proportions in this wine of eighteen volumes of spirit to sixty-two of water, the principles of the wine may exert some reaction on those of opium. For example, the free acids may assist the solution of the narcotine, which, it is well known, is more soluble in acid liquids, and may thus, according to Magendie and Orfila, notably modify the physiological effects. On the other hand, the tannin may combine with the narcotine and codeine, and neutralise them to a certain extent, as Derosne and Robiquet have pointed out.

It must, therefore, be evident that we cannot, *à priori*, ascertain the chemical composition of Sydenham's laudanum, but that at any rate it must not be considered as a mere solution of the principles of opium in wine. The chemical composition of wines, differing so much in the various kinds, it must be evident that, to obtain a preparation as similar as can be to that of Sydenham, no other wine than that of Malaga should be used. Besides, the reason of the preference given by this illustrious English physician to Malaga wine may be easily divined from the nature of that wine, which is such that it will least favour the solution of narcotine, have less influence on the codeine, and preserve the medicine longer, as it contains less free acids and less tannin, and more alcohol and sugar than the French wines.

Rousseau's Laudanum.

A very little reflection will show that the laudanum of Rousseau is still less uniform in its composition than that of Sydenham, since fermentation is so obscure an operation to us, that we cannot, so to say, either produce it, arrest it, or even direct it in its progress. Its composition must vary, not only when, instead of preparing it according to the original formula of the Abbé Rousseau, by adding to the liquid, when evaporated to the consistence of syrup, the alcohol which had been collected during the evaporation, it is made according to the directions of Baumé, by merely adding a quantity of spirit equal to that lost by evaporation, but still further in regard to the products which form during fermentation, so that it would be impossible to indicate, *à priori*, its probable composition. It is, in my opinion, one of those medicines which we ought to prepare in the same way that our fathers have done, leaving to time the explanation of whatever is incomprehensible in the preparation, either in its progress or results, and on no

account ought we to reject it, since its medicinal efficacy has been too often proved to allow its being questioned, and also because our ignorance of its actual composition will not permit our supplying its place by another.

The Distilled Water.

The distilled water of opium, according to the experiments of Pelletier, contains organic matters, and consequently whatever may be the nature of those principles, which are as yet, it may be said, not sufficiently known, without attending to the still unsettled question of their therapeutic importance, it may be readily conceived that the tincture and distilled water, both of which contain them, may owe to them their action on the animal economy, and that, nevertheless, there may not be so complete an identity, as has long been believed, between medicines which were prepared without paying attention to those volatile principles.

It is worthy of remark, that if physicians have occasionally been sufficiently ill-advised wrongly to attribute therapeutic powers to medicines which they do not really possess, chemists, on the other hand, have generally thought too little of principles existing in organic bodies which as yet they cannot seize, and are too much inclined to doubt the properties attributed to different substances, because their means of analysis do not enable them to discover any thing by which they can physically materially explain their effects. Latterly, for example, chemists have denied the hemostatic powers of a colourless and slightly empyreumatic liquid, because no reagents disturbed it, and neither evaporation nor any other means of analysis gave any traces of empyreumatic matter; but now we can readily understand that this liquid might owe its physiological properties to a very small quantity of creosote.

Extracts.

In regard to the extracts, the process of the ancient chemists which has been already described, that of Hombert, Diest, Baumé, Josse, Limousin Lamothe, Cartheuser, and Croharé, and, lastly, that of Cornet, which is now generally adopted, consists in causing the opium of the markets to macerate for thirty-six or forty-eight hours in six times its weight of hard water, and frequently repeating it; then filtering, evaporating to a soft consistency, redissolving the residue in eight parts of cold water, filtering, again evaporating, and repeating this process three times, appear to me to furnish extracts containing the same principles and in the same condition as the extract analysed by Pelletier, namely—

The meconate acid of morphia,
Meconine,
Narceine,
Gum,
Narcotine,
Resin,

Oily matter,
Brown acid colouring matter,
To which I should add—
Volatile principle,
Meconate acid of codeine, discovered since Pelletier's analysis,
Sulphate of morphia,
Sulphate of potass,
Sulphate of lime,

The residue of the opium, after maceration, will consequently be composed of—

A little brown acid extractive matter, which water can never completely dissolve,
A little gummy matter,
The greater part of the virous principle,
Narcotine,
Fatty matter,
Resinous matter,
Sulphate of lime,
All the caoutchouc,
All the bassorine, and
All the vegetable fibre.

But it must be remarked that these principles will not be dissolved in equal proportions in all these different extracts. For example, narcotine, resin, and fatty matter appear to be more abundant in extracts made with hot than in those prepared with cold water, in extracts made by treating the opium with little rather than with much water at a time, in extracts prepared simply by evaporation, than in those made by solution and successive evaporation. The reason is that the presence of a large quantity of the soluble principles of opium assists the solution of those which are less readily dissolved. This solubility is still further increased by heat, which induces a kind of union between the principles, and, finally, each time that the extract of opium is re-dissolved in a large quantity of water with the view of evaporating it again, a certain portion of fatty matter, resin, and narcotine is eliminated. On the other hand, the volatile principle will be less in extracts made by long digestion, than in those made in the ordinary manner in the mariné baths, being lost either by evaporation or organic change.

The chemical composition of these extracts, although very analogous, is not quite identic.

Extracts prepared according to the process of the Batavian Pharmacopœia, or to those of Lemery or Quincy, it appears to me, ought, like the preceding, to contain all the principles found by analysis in the watery extract of opium and in the same condition, since there is not, in all probability, the slightest re-action between the alcohol and any of those principles, but these extracts should be still more dissimilar. In fact, according to the Batavian Pharmacopœia, the opium being washed with alcohol previous to its being acted on by water, with the view of dissolving the resin, a certain portion of its active principles must also be removed; whilst in Lemery's extract, prepared by treating opium successively with

alcohol and water, the caoutchouc, bassorine, earthy matter, and remains of vegetable matter only are separated. The former of these processes will then give us, in reality, a stronger preparation than is the watery extract. If it be true that cold alcohol dissolves proportionally more fatty and resinous matter than active principle, the other ought, in an equal quantity of extract, to contain less meconate acid of morphia, and of codeine, meconine, and narceine, since it contains all the resin and fatty matter usually present in opium, and which the water almost completely separates. It ought, however, to be observed, that as there is a larger quantity of narcotine present in the latter extract, it may serve as a sort of compensation.

The vinous extract of the Codex of 1758 appears to resemble very much the extract prepared according to Lemery's directions, but the addition of the constituent principles of the wine, which must be looked upon in a double view, both in regard to the re-action they may exert, and the additions they make to the mass of extract, do not allow us to prove that complete analogy which at first might be supposed to exist. The remarks made on the laudanum of Sydenham, are, in fact, applicable to this kind of extract, inasmuch as the wine contains alcohol, acid, and tannin, in varying proportions. Besides as the Codex did not state the quantity of wine to be employed, it is probable that, *cæteris paribus*, the extract may differ should different quantities of menstruum be used in preparing the several specimens.

The ethereal extract, prepared according to the directions of Robiquet and Dublanc the younger, differs very much from the preceding, for the ether not only separates the narcotine and fatty matter, a little of which is always present in the aqueous extracts, but also the meconine, without doubt, which is known to possess, equally with the narcotine, the exclusive properties of the meconates of morphia, codeine, and also of the narceine, of not being exclusively dissolved in ether.

This extract must, therefore, be considered as a peculiar preparation, differing very much in its composition, and, doubtlessly, also in its physiological properties, from extracts properly so called.

The preparations of opium just examined do not appear to be identic in their composition, the constituent principles varying either in quantity or condition, and consequently their action on the animal economy cannot be the same.

But as the physiological effects which physicians are desirous of producing when giving opium, are exceedingly varied, advantage may be derived from employing one of these preparations in certain cases, which would be injurious in a case of a contrary nature. Thus when the physiological effect which may be required will be caused by the meconates of codeine and morphia, rather than narcotine,

or injuriously modified by the presence of the latter substance, the extract of Robiquet and Dublanc, which does not contain narcotine, will be preferable to the common aqueous extracts; so also the laudanum of Rousseau, prepared according to the original formula, should be preferred to that made in accordance with the direction of Baumé. Each of these various preparations may possess its own peculiar advantages, but it does not follow that they are all equally valuable.

In the first place, it cannot be denied that those preparations of opium, such as certain extracts, and laudanum by fermentation, the processes for making which are such that they cannot furnish a result which will be always identic, labour under a marked disadvantage.

Then again there are others which appear to be so exceedingly analogous in their composition, from their mode of preparation, that they may be readily confounded with each other; such are the majority of the aqueous extracts.

The attention of physiologists and chemists should be directed to these matters, with the view of ascertaining by direct experiment the best means of readily obtaining the most useful of these preparations, and in its best condition. The pharmaceutic art will be materially benefited by such proceedings, as they will tend to bring forward new preparations, the advantages of which, however, in the course of a few years, may become as problematical as of those at present in common use.

A COMPARATIVE ESSAY ON THE MANNA CALLED MANNA OF BRIANÇON, AND THAT OF THE FRAXINUS EXCELSIOR.

BY M. BONASTRE.

AMONG the spontaneous and other exudations which are commonly observed on the surface of trees at certain periods of the year, whether they form naturally, by the powers of vegetation alone, or are induced by the punctures of insects, one of the most singular and curious is undoubtedly the manna of Briançon, gathered on the *Larix Europæa*.

In the *Journal de Pharmacie* for 1822, vol. viii., p. 335, I endeavoured, with the assistance of our late honourable colleagues Dupouchel and Moringlane, to draw the attention of the Society to this singular substance. We procured some from Briançon, where it is collected on the larches which grow in abundance in the neighbourhood of that town. It is known that these trees, at a certain period of the year, are so overcharged with this manna, that it may be collected; but this is generally done solely as an object of curiosity. The quantity of this substance is so small as not always to repay the expenses of its collection. Besides a saccharine juice, such as the

manna of Briançon, may be easily replaced by the manna of the ash, honey, or sugar, and as it is not much used in medicine, its neglect may be readily explained.

Nevertheless, as an object of pharmaceutic and medical natural history, this substance ought not, perhaps, to be altogether despised; it presents even some points of interest. Its formation on a tree of the order *Coniferae*, which furnishes the liquid turpentine abundantly, its sudden appearance at a certain period, not completely determined, and its as sudden disappearance under the influence of certain solar or atmospheric re-actions, make it naturally a subject for study.

As it was impossible for me to verify on the spot the cause of the more or less contradictory opinions given in regard to it, I was necessarily obliged to have recourse to a method of investigation more within my reach, that of analysis, in order to ascertain, by means of proper solvents, if I could obtain the *mannite* from this substance, as from the manna of the ash.

The manna of Briançon which is in my possession, was gathered in 1822. It is in small unequal fragments, rather smooth, and rounded off at one end; for this reason it has been compared to the coriander seed, which, however, it does not resemble either in the regularity of its sphere, or in its size. Many pieces contain the leaf of the *Larix Europæa* within them. In the recent state these fragments are dry, and almost inodorous. After some time they become soft, and their odour resembles very much that of the common manna. The taste is mild and saccharine, even rather nauseous; the colour is whitish, or slightly yellowish. Finally there is so much analogy in the colour, smell, and taste of the manna of Briançon and that of the ash of Calabria, that at first view they may be readily confounded, and we need not be surprised if both substances are designated under the generic term *manna*.

Examination.—My first object was to try the comparative action of cold water on the two substances.

I chose one of the finest tears of the manna of Briançon in my collection; the juice in this specimen had encrusted itself around a leaf of the larch, which proved it to be genuine; it weighed four grains. I placed it in about six times its weight of cold water in an experiment glass. I left it thus for several hours, at a temperature of 15° above zero. I acted in the same manner with the manna in tears, and the common manna. After several hours had elapsed, I observed that the two latter were dissolved, with the exception that the common manna had left a slight residue or earthy deposit. In regard to the manna of Briançon, at first view it was evident that a certain quantity of it only was dissolved, that is to say, the soluble saccharine matter, for the solution being concentrated, assumed more and more a sweetish taste. But what appeared to

me to be the most singular, and which sufficiently established at this part of the analysis a real difference, was the appearance on the surface of the solution of a certain accumulation, of apparently a spongy texture, which, to the naked eye, seemed to be formed of small setaceous filaments of a dirty grey colour, like small spiders' webs, so that by adding a little more water, and shaking the glass, small organised bodies were observed to separate from it, as it were, for example, the remains of exceedingly minute insects.

I then poured off the first water, and added fresh, repeating this operation several times; but it was all in vain: the water would not dissolve any more of the saccharine matter, and the spongy collection always remained on the surface.

I repeated this experiment with fresh pieces of the manna of Briançon, strong or weak; some containing the leaf of the larch, and others not, and always with the same results—that is to say, complete solubility of the saccharine matter in water, insolubility of the spongy substance in the same vehicle. The manna of Briançon then differs essentially from the manna of Calabria, by the presence of this spongy substance, insoluble in water.

The non-identity of the two mannas having been proved, and doubts having been raised in my mind as to the singular organisation of the last products, I gave up the comparative experiments with the manna of Calabria, with the view of prosecuting my researches solely on the manna of Briançon.

Cold alcohol did not appear to have a very sensible action upon it, dissolving only a small quantity: the viscosity of the saccharine product is probably the cause of this want of action.

Boiling alcohol dissolves more than the cold menstruum: it causes the manna to break in pieces, become white, and emit an innumerable quantity of small whitish particles, which are deposited on cooling. These are nothing else than the viscid saccharine matter, insoluble in this fluid; for if the alcohol be carefully poured off, and distilled water poured on the deposit, it will be dissolved in a few instants.

The different portions of the fragments on which the alcohol had acted, and which had not been dissolved, had nevertheless increased in volume. On examining them with care, it was easy to perceive that they formed a species of net-work, or little cells, whence the boiling alcohol had dislodged the small particles of saccharine or viscid saccharine matter; for some of these small particles were still niched in this cellular net-work.

If this net-work, previously treated thus, be submitted to the action of heat, it swells up very much, and gives out at first an odour resembling that of well-boiled sugar; then a little of it melts like an oleaginous matter, but is re-dissolved in water. If the heat be continued, the substance clears, blackens, and gives forth a great deal of vapour, which,

nevertheless, does not afford, at least ostensibly, the smell of animal matter.

These experiments tend to prove that the manna of Briançon is not altogether of the same nature as that of Calabria, or probably produced in the same manner. If the latter is obtained by incisions made into several species of the ash, the manna of Briançon, on the contrary, would be produced by the punctures made by small insects, such as the coccus mannifer, which are met with on many tamarisks of the Levant.

However, this latter part of the operation requires confirmation. Hitherto, I must confess, it is only an opinion which appears to me to be the most probable, but not certain. I do not know any chemical re-agent which can remove this re-agent. Such would be a case, if even there were one, to affix, as M. Rosquil has said, the chemist's laboratory on the sliderholder of a microscope—to make, in a word, a microscopic organic chemistry. This will be the subject of a second essay.

M. ROUYER ON MUMMIES.

M. ROUYER has endeavoured to class the mummies he saw in Egypt under two principal divisions, and these he subdivides into others. The principal divisions are—

I. Those having an incision in the left flank for the eviscerating of the body ;

II. Those without any incision.

I. Of the mummies with the ventral incision, they are those preserved,

1st. By balsamic matter,

2nd. By natron.

Those dried by balsamic and astringent substances are filled with a mixture of resin and aromatics, and the others with asphaltum or pure bitumen. Those filled with resinous matter are of an olive colour, the skin dry, flexible, and like a tanned skin, retracted and adherent to the bones. The features are preserved, to appear as during life. The belly and chest are filled with resin, partly soluble in spirit of wine. These substances have no particular odour by which they can be recognised ; but, thrown upon hot coals, a thick smoke is produced, giving out a strong aromatic smell. These mummies are dry, light, and easily broken : the teeth, hair of the head, and eyebrows, preserved. Some of these are gilt on the surface of the body, others only on the face, on the sexual parts, or on the hands and feet. The mummies filled with bitumen are black, the skin hard and shining, and as if coloured with varnish ; the features perfect ; the belly, chest, and head filled with resin, black and hard, and having little odour ; and, upon being examined, are found to yield the same results as the Jews' pitch met with in commerce. These mummies are dry and heavy ; have no smell, and are difficult to develop or break. They have been pre-

pared with great care, and are very little susceptible of decomposition from exposure to the air*.

The mummies with ventral incisions, and prepared by natron, are also filled with resinous substances, and also asphaltum. The skin is hard and elastic : it resembles parchment, and does not adhere to the bones. The resins and the bitumen injected into these mummies are little friable, and give out no odour. The countenance of the body is little altered, and the hair is badly preserved : what remains usually falls off upon being touched. These mummies are very numerous, and if exposed to the air become covered with an efflorescence of sulphate of soda : they readily absorb humidity from the atmosphere.

II. Those without the ventral incision.

These are also of two kinds—

1st. Salted and filled with bituminous matter less pure than the others, and called pissasphaltum ;

2nd. Simply salted.

The mummies preserved with pissasphaltum are not recognisable : all the cavities are filled, and the surface of the body is covered with this mineral pitch. It penetrates the body, and forms with it one indistinguishable mass. These mummies, M. Rouyer conceives, were submersed in vessels containing the pitch in a liquid state. They are the most numerous of all kinds, black, dry, heavy, and of a disagreeable odour, and very difficult to break. Neither the eyebrows nor hair is preserved, and there is no gilding upon them. The bituminous matter is fatty to the touch, less black and brittle than the asphaltum, and yields a very strong odour. It dissolves imperfectly in alcohol, and when thrown upon hot coals emits a thick smoke and disagreeable smell. When distilled it gives an abundant oil, fat, and of a brown colour and fetid odour. Exposed to the air, these mummies soon change, attract humidity, and become covered with an efflorescence of saline substances.

The mummies simply salted and dried are generally worse preserved than those filled with resin and bitumen. The skin is dry, white, elastic, light, yielding no odour, and is easily broken ; is blanched and supple, and masses of adipocire are frequently found in them. The features are destroyed, the hair is entirely removed, the bones are detached from their connexions with the slightest effort, and they are white like those of a skeleton. The cloth enveloping fall to pieces upon being touched. These mummies are generally found in particular caves, which contain great quantities of saline matters, principally the sulphate of soda.—*Pettigrew on the Mummies.*

* When the asphaltum incorporates with the body it becomes brown and greasy, and easily crumbles into powder ; when it does not incorporate with the flesh it retains its shining black colour.

Review.

The Pathology and Diagnosis of Diseases of the Chest; illustrated especially by a Rational Exposition of their Physical Signs; with New Researches on the Sounds of the Heart. By CHAS. J. B. WILLIAMS, M.D., F.R.S., M.R.I., Member of the Royal College of Physicians, Consulting Physician to the North-West London Self-Supporting Dispensary, and to the Portman-Square and Harley-Street District Dispensaries, &c. Third Edition, much enlarged. London: John Churchill. 1835.

THE immortal discovery of Laennec has conferred a benefit upon mankind and the profession, which it will be difficult for his successors to surpass. He has made one of the most simple principles in physics applicable to the detection of many of those diseases which are the most afflicting and, perhaps we may affirm, the most mortal to humanity. Prior to the invention of the stethoscope, the now almost magic wand of the physician, many of the thoracic diseases were concealed beneath an impenetrable veil, their existence was predicated by rude and often uncertain signs, and their locality and nature were based purely upon conjecture. We now possess a diagnostic means which enables us to determine almost to a certainty the existence of disease in the chest, to aver with remarkable exactness its site, its character; and thus we are enabled to form a prognosis satisfactory to the practitioner, inasmuch as he can deliver to the friends of his patient an opinion of the state of the case, and he is in possession of the consolation that remedial means may be available or they may not. His course of action is thence predestined, and he steers it safely, unchecked by the malevolence of enemies, and soars above the feelings of chicanery and ignorance.

Dr. Williams is acknowledged to be a good practitioner, his means of acquiring information have been extensive, and he has applied them to useful purposes. The present work has arrived at the third edition: its objects and plan are unfolded in the following extract:—

“I have ever found in practice, and it is perfectly conformable to reason, that the easiest and most agreeable way to study physical signs, and to attain the surest criterion of their value and importance, is by considering how they are caused, or what are the relations in which they stand to the physiological and pathological states that produce them. Attempts to discover the rationale of the general symptoms of disease, have been as unsuccessful as our knowledge of the functions or properties on which they depend is scanty and imperfect, and inquiries of this kind have been proportionately unsatisfactory and unprofitable. But physical signs stand on the broad and intelligible basis of physical laws, and are as readily explained as other simple phenomena illus-

trated by natural philosophy. It has been my endeavour to exhibit them, as far as possible, in this intelligible view; to show the mechanism by which the signs are produced, and the manner in which, according to fixed laws, they result as phenomena; to make a knowledge of the pathology predicate the signs, and a knowledge of the signs indicate the pathology; and by thus familiarising the mind with their principles, to enable it to understand the multifarious forms which, by combination, these signs may assume, and to judge of the corresponding physical changes that modify or produce them.”

The Doctor pays a well-merited tribute to the genius and the labours of Laennec and Andral. It is scarcely possible to give a review of a book, comprising so much important and valuable matter, in the limited space our hebdomadal prescribes. We can but advert to its general character, leaving its machinery for the reader to study.

If proofs were necessary for the employment of the stethoscope in preference to mediate auscultation, the enjoined observations are so pertinent that we are tempted to extract them.

“I would now say a few words on the advantages of mediate auscultation, and of the necessity of the stethoscope to those who wish to avail themselves fully of physical diagnosis in general practice. After what has been said by Laennec and others on this point, I should have hardly deemed it necessary to mention it here, were it not that several writers, otherwise advocates of auscultation, have spoken slightly of the aid afforded by the stethoscope. Could the naked ear be in all cases applied to the chest of a patient, the utility of the stethoscope might be more reasonably questioned. But it cannot be denied that immediate auscultation is, in many circumstances, impracticable; in some cases being disgusting, in others indelicate, and in infectious disorders unsafe; whilst these objections are not applicable to the use of the stethoscope. Further, if it be said, restrict its use to these cases, we reply, that unless we have more practice with it than can be obtained in these only, the stethoscope would be comparatively useless in our hands, for its indications, although more accurate than those of the unaided ear, unquestionably require more practice to obtain them.

“But there are other circumstances which give to mediate auscultation a claim of preference; and, as they illustrate the application of the instrument, I think it proper to mention them. The unaided ear, although capable of perceiving very delicately the sounds produced under the surface to which it is applied, cannot isolate any particular spot; and the sounds transmitted by the parts adjoining the ear, the temporal zygoma, the mastoid protuberances, &c., as well as the adventitious noises liable to be produced by the friction of the hair of the head and face, are frequently mixed with and confuse the signs from the spot under exa-

mination. On the other hand, by the stethoscope, we can separate any individual point; and by tracing the sounds to their exact position in the organs within, we can accurately determine their value as signs. This faculty is, in some cases, of great importance. It is only by its means that we can discern the limits between a natural resonance of the voice under the clavicles, between the scapulæ, and in the axillæ, and the morbid resonance which an induration of the tissue of the lung produces in parts immediately adjoining these regions. The stethoscope with the stopper not unfrequently discovers a sound to be merely a natural resonance, which to the open instrument, or to the naked ear, has the character of morbid bronchophony; and the variations in the form of the instrument furnish a means of distinction between the degrees of pectoriloquy, more accurate than can be obtained by the ear alone. The capability of the stethoscope to separate the sound from the impulse of the heart, and the facility with which it can be applied to the infra-clavicular and axillary regions, and to the examination of sounds in the carotid arteries and abdominal aorta, which are not within the convenient reach of the unassisted ear, are further and important advantages of mediate auscultation. Although, therefore, with a view to expedition and convenience, immediate auscultation may be occasionally substituted, I am confident that no one who has once trained his ears to the use of the stethoscope, will ever so lightly esteem its aid, as again to abandon it."

There are two points, however, to which it may not be uninteresting to advert. The first is—What is the cause of the cordal sounds? Secondly—How do the heart and the lungs reciprocally influence each other in diseased action? They are, it must be confessed, *in limine*, interrogatories not yet answered. Minds of great capacity have been exercised on these topics: theory after theory has been propounded, and we yet must acknowledge the impotency of our labours. Natural philosophy, thoroughly understood, may determine the former, and physiology, combined with observation and research at the bedside of the sick, and inspection of the body after death, may enable us to confirm or to deny doctrines which now float upon the surface as straws upon the running streams. Assertion is not proof, nor is inference from few data, on questions like these, admissible.

Dr. Williams's work evinces a candid mind; great research for the attainment of truth; learning; profound reflection on the most comprehensive subjects as on the details; and will be read with advantage by the most experienced physician. If it have a superior, it is only "Forbes' Translation of Laennec." The new edition of Dr. Hope's work on the Diseases of the Heart, &c. with an Appendix, is also an extremely valuable production. It is so well known as to need not our further commendation.

Reports of Societies.

LONDON MEDICAL SOCIETY.

Monday, May 18th, 1835.

DR. WHITING, President, in the Chair.

MR. PILCHER exhibited to the Society a sarcomatous tumour the size of a large orange, and a plaster cast of the same, which he had taken from a patient, aged 60 years, who had demanded its removal, more probably from its appearance, than the pains or inconvenience it created, as the man grasped it with his hand, and showed that it was moveable, and by so doing evinced no uneasiness. The tumour, judging from the cast, resembled a large nipple, bounded superiorly by the lobes of the ear, anteriorly by the parotid gland (which it pushed upwards and outwards) and the base of the lower jaw, and posteriorly and inferiorly by the sterno-cleido-mastoideus muscle. It had existed twelve years, making but small progress, but latterly had increased more rapidly.

During the operation he was assisted by his colleague Mr. Grainger, and Mr. Barron, and as the vessels were divided they were taken up and tied, which caused considerable loss of time, to prevent which, the operator thought, should he be called on in future to operate on a tumour similarly situated, that he should cause the hæmorrhage to be restrained by pressure, and take up the bleeding vessels after its removal. A portion of the parotid gland was removed with it (the entire gland might have been easily taken away if required) and likewise a part of the *pes anserinus*, which gave rise to slight paralytic affection of some of the muscles of the face, from which the patient, no doubt, would have recovered had he lived. As the tumour was seated in the immediate neighbourhood of important vessels, the principal part of the operation consisted of turning out the tumour by the fingers, rather than cutting it out, as it was not advisable to trust too much to the knife in the dark, hence occasioning considerable laceration of the cellular tissue. The operation was performed late on Monday afternoon (this day three weeks) and he was doing well until the following Wednesday evening, when suddenly laborious breathing, difficult deglutition, and a distressing cough supervened, which increased, and terminated his existence the succeeding night. When these symptoms manifested themselves. Mr. Pilcher conceived that during the operation the *par vagum* might possibly have been injured, but it was found perfectly healthy after death; the sole mischief, as far as he could judge from the restricted examination allowed, was seated in the cellular tissue, which was greatly inflamed, spreading or communicating to the larynx, but the external surface of the wound exhibited no inflammatory traces. Mr. Pilcher said he

was led to offer this case to the notice of the Society to ascertain whether the members considered that surgeons were justified in operating on tumours that might be regarded as dangerously placed, especially as this had proved fatal, and as Dr. Whiting had proposed it at the termination of the last meeting as a fit subject for discussion.

Mr. Clifton, after a long silence, thanked Mr. Pilcher for the instructive case he had narrated, and doubly so as it ended unfavourably, for few had sufficient courage to bring them forward, however instructive.

Mr. Field requested to know, whether Mr. Pilcher could put the Society in possession of other cases of a similar nature?

Mr. Pilcher, in reply, briefly noticed two cases, one of which Mr. Abernethy had operated on when in the height of his career, that terminated fatally. The other he had seen operated on unsuccessfully in St. Thomas's Hospital, where the parotid gland was also injured. But, he observed, thinking of the above two had brought to his recollection a case of tumour of the tonsil gland that had grown to an enormous size, producing great uneasiness, and driving the carotid artery backwards and outwards. Mr. Liston was requested to see this patient, a young man about 22 years of age, sent from the neighbourhood of Maidstone, who, he must confess, formed an excellent diagnosis of it, giving it as his opinion that it was not simply an enlargement of the gland, but a tumour connected with it, and adhering to the lining membrane of the pharynx, but how far it dipped down could not be ascertained. The treatment adopted consisted sometimes of cutting a portion away piecemeal, or by passing a ligature round it, and getting rid of portions of it, or destroying it by caustic, which not only afforded relief, but got rid of the complaint. When he (Mr. Pilcher) was first solicited to see it, no allusion was made to its appearance in the throat, considering it from its size an external tumour; but, before asking the patient any questions, he desired him to open his mouth, when he readily perceived that, if an operation was to be performed, it must be attempted from within and not without.

Dr. Whiting, to prevent a break in the discussion, related a case of tumour that had been taken from a lady, about twenty-two years ago, by Sir Astley Cooper, with complete success, although a surgeon had previously attempted to remove it in the country in a most bungling manner, by heating an iron needle, applying it so as to produce sloughing, and then allowing it to heal. Afterwards it grew more rapidly than before, which led her to place herself under Sir Astley, when it resembled so exactly the cast now on the table, that it immediately brought the former to his remembrance. In operating, Sir Astley avoided most studiously cutting the parotid gland.

Mr. Roberts said, he felt inclined to relate

to the Society a singular case that had come under his notice, of which at first he was rather incredulous of its existence; for the man stated that while he was eating his dinner, a large tumour had appeared at the side of his throat, and, during the time he was coming to him, it had entirely disappeared; and this was not the only time it had suddenly formed, and as suddenly vanished. He prescribed leeches and other antiphlogistic measures, not knowing exactly what to prescribe, but this treatment prevented a re-appearance.

Mr. Pilcher apologised for rising so frequently, and which he should not think of doing, were it not to prevent loss of time, and which he hoped would be better occupied by detailing an extraordinary case that had come under the notice of a highly talented practitioner, residing at Croom's Hill, Greenwich, whose name he could not just at present recollect; but the facts were these:—A lady, hysterical, complained to the gentleman that she had an eel crawl out of her mouth, of great length, but before he could be sent for, it had returned. He directed the next time it showed itself, that either herself, or any one present, should seize it, and hold it fast until he arrived. This was effected by holding it coiled round the hand; and on examining the patient's throat, the surgeon found it was attached to its lining membrane, from which he detached it as low down as he could reach, and found it to be a long polypus, that was protruded out of the mouth by the efforts of vomiting; and when these had subsided, it was retracted into the stomach. The polypus is preserved in the Surgeons' Museum.

A gentleman detailed the case of enormous abdominal tumour (weighing 46 pounds), which Mr. Lizars, of Edinburgh, successfully removed; but as it has been published by that celebrated anatomist and bold surgeon, and as it is familiar to all, alluding to it as affording a part of the topic of this night's discussion must suffice.

Mr. Hughes desired to know of Mr. Pilcher, whether it would not be advisable, in cases of tumours dangerously situated, to cut away only a portion of them, and leave the rest behind; not but what he felt that this proposition might prove a kind of slur on his anatomical knowledge, but from this Mr. Pilcher had nothing to fear.

Mr. Pilcher answered that, judging from his own experience and what he had seen and read, that if they were attempted to be removed, they should be completely, not only in malignant and encysted tumours, of which there were many kinds, but of every sort.

Dr. Whiting believed he said that the case he had cited would be a good answer to Mr. Hughes' inquiry, for that, like most other cases of tumour when interfered with and not perfectly extirpated, they enlarged much more rapidly afterwards than heretofore. What he was now going to remark on would not be considered, perhaps, as coming from the best

authority,—a doctor's evidence on a surgical subject,—but they were based on facts alone, viz.—that he had long since concluded that it was far better to leave the parotid gland uninjured, and, if this could not be prevented, the whole of it should be removed in preference to a part of it, as he (Dr. W.) looked upon the escape of saliva as capable of setting up irritation in the same manner as was occasioned by the infiltration of urine into the scrotum or cavity of the peritoneum.

The President then adjourned the meeting, announcing that, as the next would be the last for this season, he hoped it would be well attended and supported, so as to make a good finale.

ROYAL COLLEGE OF PHYSICIANS.

Monday, May 25th, 1835.

Sir H. HALFORD, Bart., President, in the Chair.

Small-Pox after Vaccination—Dropsy.

A paper was read this evening from Mr. Field, of Christ's Hospital, on the appearance of small-pox after vaccination among the boys of that hospital, to which institution he has been attached as resident medical officer for the period of thirty years. The data which formed the basis of his observations were drawn from the registers kept by himself, and included a period of ten years, from 1825 to 1834, both years being taken into the account. Within that time one thousand eight hundred and seventy-seven boys were admitted from the age of seven to fifteen; of these there is reason to believe that very few were not vaccinated, the number being so small as not to invalidate the conclusions drawn by Mr. F. About eighty-nine cases of small-pox occurred in the course of these ten years, and one, which was attended with peculiar symptoms, proved fatal. The greatest number of cases were observed in the months of July and August of the year 1825. The average proportion therefore, of small-pox after vaccination, in the cases which were under Mr. Field's care, was about one and a fraction in every twenty-one. The child whose disease terminated fatally, was attacked with measles early in 1825, which proved very severe and protracted, but from which he finally recovered, remaining, however, exceedingly weak. In July of the same year he was sent to his friends at Maidstone, where he was exposed to the variolous infection, and, although previously vaccinated, became affected by it in its confluent and most virulent form, and soon sunk.

Mr. Field was unable to give an accurate account of the boys at the establishment at Hertford from his own observation, but from the information derived from the late resident medical officer, it appears that a few cases of a mild character had occurred, but not any had

terminated fatally. From these data Mr. Field is induced to differ in opinion with Dr. Gregory, who holds that the original vaccine virus has lost its protective influence, and that vaccination has now arrived at its greatest state of imperfection, and consequently that recourse should be again had to the cow for a further supply.

Another paper was then read, on dropsy, by Dr. Macmichael, containing a few prefatory observations on that symptom of disease, made with the view of introducing an outline of the case of his royal highness the late Duke of York. As the main facts of this case have been already brought before the medical public, and as the paper did not contain anything more novel than a bad pun, we do not deem it necessary either to occupy our columns or detain our readers' attention by detailing any of the particulars.

Sir H. Halford, after the conclusion of the paper, observed that, in consequence of the lamented death of Sir G. Tuthill, who was to have delivered the Harveian oration, he had undertaken that duty himself, as he did not think it right to apply to any other gentleman, inasmuch as only a month could be given for preparation. On the 25th of June, therefore, he hoped to meet them all, when he should have to speak of the illustrious dead.

MEDICO-BOTANICAL SOCIETY.

May 26th, 1835.

HUMPHREY GIBBS, Esq. in the Chair.

ON entering the apartments of the Society this evening we were struck with the magnificent display of plants and drugs on the table. The latter were very valuable specimens of the kind: they were exhibited in substance, powder, extract, concentrated infusion, essential oil, &c.

A letter was then read from Mr. Maynard, addressed to Mr. Battley, stating that he had found the buchu leaf (*diosma crenata*) very useful in cases of rheumatism.

M. Lecanu's paper on Opium, which will be found in another part of this Number, was then read, after which Dr. Sigmond proceeded to make some observations on the drugs on the table. He particularised two specimens of powdered squill, the one dried in England, the other abroad. The difference in price and in real medicinal value was stated to be very great, the latter being sold at tenpence, the former at three shillings. He pointed out to the notice of the Society some fine specimens of both varieties of rhubarb, the rheum palmatum, and the rheum undulatum: the former, which is obtained from Russia and Turkey, is in round compact pieces, generally perforated with a hole in the centre, an indication that it has passed the Russian Custom-house; the latter, brought from China, consists of long flat pieces, and is not near so good as the Russian. The powdered rhubarb is frequently

mixed with that of the English root. It is a curious fact that ten or fifteen grains of the root of rhubarb in mass will act as efficaciously as thirty or forty grains of the powder; and it was observed by Dr. Sigmond, that in general medicines ought not to be finely powdered, but, on the contrary, only rasped, as otherwise their medicinal efficacy is impaired.

An extraordinary case was alluded to in the course of these remarks, of tic douloureux cured by the administration of quina as a snuff; and, in corroboration of the effects of some medicines on the olfactory nerves, and through them on the general system, it was stated, that lately Mr. Battley had been made seriously ill by leaning over a vessel containing a preparation of opium.

In concluding, Dr. Sigmond took occasion to express his opinion, that the aqueous preparations of opium were by far the most valuable, and to state, that he was not inclined to place much confidence in the new preparations, namely, the acetate and muriate of morphia, &c.

Some remarks were afterwards made principally upon opium, its products and educts, and the means of counteracting its injurious effects upon the animal economy. The impression among the speakers seemed to be generally in disfavour of a most valuable instrument, the stomach-pump, and was more unequivocally marked in support of the plan of injecting warm water into the stomach, and allowing nature to throw it and the opiate off by vomiting. It was urged that this is frequently the case even when the stomach-pump is used, but it seems to have escaped the speakers, that the vomiting in that case is induced not by the presence of the water, but by mechanical irritation, caused by the tube of the stomach-pump. It was further remarked, that a portion of the stomach might be drawn up by the pipe; but we cannot see how that can by any possibility happen. The stomach-pump is, in our opinion, one of the most brilliant inventions of modern times; and we believe there are very few would rather have recourse to the injection of warm water than use it.

Dr. Morries, in the course of the evening, gave it as his opinion, that the substances enumerated by Lecanu as contained in opium, with the exception of morphia, narcotine, and codeine, were educts of the chemical manipulations used in analysis, and not actually constituents of that drug. He remarked, that the muriate of morphia generally contained codeine, and then would give rise to very unpleasant symptoms; when it was deprived of it, it became a mere anodyne, and its use was not followed by that headach which was most consequent on the employment of opiates.

SELECTIONS FROM THE GULSTONIAN LECTURES.

Delivered at the College of Physicians,

BY A. P. W. PHILIP, M.D., F.R.S.

AFTER speaking of the erroneous notions that existed, relating to the power of the nervous system in producing disease, Dr. Philip stated that it would be necessary for him, first to point out the physiological errors which have in modern times most influenced the practice of medicine, and the means which have been employed for the purpose of correcting them; and afterwards he should consider the manner in which the practical part of our profession have been influenced by them, and the advantages that might be expected from their correction.

I shall no farther, says Dr. W. Philip, enter on the physiological part of the subject than is requisite for a full understanding of what I am about to say of the practical part; but it is necessary, in order to place the whole in a clear point of view, and one that will both better command the attention, and otherwise assist the memory, than a simple statement of the results would do, to give a short history of the origin and progress of the errors in question, before I enter on the manner in which they have influenced the treatment of diseases, and the advantages to be expected from correcting them.

The necessity of such a detail will be apparent if we look into the works of the latest writers on the subject. When the prominent nature of sensation, violition, and the other mental operations in the animal economy is considered, it is not surprising that, till the functions of the brain and spinal marrow were made the subjects of direct experiment, physiologists should have regarded them as organs of these functions alone; but it must, I think, surprise us that the same opinions should still be maintained.

Dr. Henry, of Manchester, in the *Report of the British Association for the Advancement of Science, for 1833*, observes, 'The function of the spinal cord is simply that of a conductor of motive impulses from the brain to the nerves supplying the muscles, and of sensitive impressions from the surface of the body to the sensorium commune.' It will appear, I think, from the facts I am about to lay before the College, that it would be difficult to conceive a more erroneous statement—a statement in which the most important functions of the spinal marrow are wholly overlooked; for, important as the functions of the sensitive system are, those of the vital system must, at least in a medical point of view, be regarded as still more so; and from the same work similar observations respecting the brain itself might be quoted; and similar opinions are maintained by Dr. Alison, Professor of the Institutes of Medicine in the University of Edinburgh, in his *Dissertation on the State*

of *Medical Science from the Termination of the Eighteenth Century to the present Time*, published last year in the *Cyclopædia of Practical Medicine*. The latter author is not satisfied with a simple statement of the opinions in question, but attempts, as we shall find, to reply to the facts which oppose them.

These writers are not to be ranked among the medical scribblers of the day. When such men as Dr. Alison and Dr. Henry maintain opinions, as far as I am capable of judging, in direct opposition to the simplest facts—opinions which strike at the root, as I think it will appear, of all correct knowledge of the most formidable diseases—it is time seriously to review the subject, and determine where the truth lies.

I have already had occasion to observe that Haller was the first who taught, in a way that commanded general attention, that the muscular power is derived from the mechanism of the muscular fibre itself, and is therefore independent of the nervous system. Not satisfied with this inference alone, and finding that he could not influence the heart in the same way as the muscles of voluntary motion, through the nerves, he too hastily inferred that this organ is removed from the immediate influence of the nervous system.

Both inferences were attended with difficulties too apparent to permit them to be generally received. We are not warranted, it was said, to infer that the power of the muscular fibre is independent of the nervous system, merely from finding that it retains its power for a short time after it is separated from the brain, spinal marrow, and larger nerves; because the extremities of the nerves are too minute and intimately blended with that fibre to be removed; and to nervous influence, which may be supposed to remain in them, the temporary power of the separated muscle may be ascribed: and with respect to the immediate influence of the brain and spinal marrow on the muscles of involuntary motion, even on the supposition that they derive their power from their own mechanism, questions were put to Haller and his followers to which they were unable to make any satisfactory reply. Why (it was asked), if the heart be not under the immediate influence of the nervous system, is it supplied with nerves?—and why is it influenced by the passions?

Difficulties thus presented themselves on both sides; for it was evident, from the experiments of Haller, that the heart could not be influenced through its nerves in the same way as a muscle of voluntary motion.

When an account of M. le Gallois's experiments appeared, it was for a short time supposed, both by the physiologists of this country and the continent, that they had removed all difficulties, not only with respect to this question, but also with respect to the source of muscular power, by proving that the heart derives the power of maintaining the circulation from the spinal marrow. It was only necessary to suppose that the brain influences the

heart through the spinal marrow, in order to give a satisfactory reply to Haller and his followers, respecting both questions.

A committee was appointed by the Royal Academy of Paris, consisting of the celebrated Humboldt and other eminent physiologists, to witness the repetition of M. le Gallois's experiments, and deliver a report respecting them, and the inferences they afforded. In their report, which is nearly as long as the original account of the experiments, this committee not only admitted the accuracy of the experiments, and the legitimacy of M. le Gallois's inferences from them, but declared that they had removed all the difficulties which had so long and vainly engaged the attention of physiologists.

It was at once evident, from the nature of M. le Gallois's experiments, that they proved, in opposition to the opinion of Haller, that the heart is under the immediate influence of the spinal marrow. They proved that its power could be impaired, and even almost instantly destroyed by agents the operation of which is confined to that organ; but with respect to the source from which the heart derives its power, the accuracy of his inferences we shall find very different.

In the first place, admitting every thing that M. le Gallois and the committee say, all difficulties were not removed, because the action of the heart continues after it is separated from the body, which ought not to be the case if its power depend on the spinal marrow; and, in attempting to evade this difficulty, they were forced into the very improbable conclusion, and which we shall find is even inconsistent with some of M. le Gallois's experiments, that the heart possesses two kinds of power—one depending on the spinal marrow, and another (in conformity with the opinion of Haller) on its own mechanism; but which, it was alleged, unassisted by the former, is wholly incapable of maintaining the circulation.

But were this conclusion of M. le Gallois and the committee, which we shall find in opposition to the most direct facts, admitted, there are much more formidable objections to their opinions on this part of the subject; for none of M. Gallois's experiments, when duly considered, it will appear, afford the conclusion that the spinal marrow possesses any power over the heart, not equally possessed by the brain itself.

The inferences of M. le Gallois and the committee, however, were carried much farther. From other experiments, they inferred that the powers of circulation in every part of the body depend on the corresponding part of the spinal marrow. In their inferences on this part of the subject, we shall find there is more than one fallacy—a fallacy in the experiments, as well as in the inferences from them, which is equally fatal to their conclusion.

But still greater difficulties attend their opinions, for they found that while the sudden destruction of a certain part of the spinal marrow never failed to impair the circulation in

the part observed, the destruction of the same part, by small portions, produced little or no effect, on it. Here the difficulty appeared so formidable, that M. le Gallois confesses it had nearly induced him to abandon the inquiry; and we shall find him displaying more ingenuity than accuracy in the means by which he persuaded himself and the committee he had removed it.

Other opinions to which M. le Gallois and the committee were led, we shall find are no less unfounded. The opinion of the great sympathetic nerve wholly deriving its origin from the spinal marrow is of much less consequence than the inference that the functions of all the vital organs are equally dependent on the powers of the nervous system. It will appear, from what I am about to say, to how great an extent the last of these errors evinces mistaken views of the functions of life; which are no less evinced, we shall find, by the difficulties of M. le Gallois respecting the functions of respiration. He had adduced sufficient proofs of the spinal marrow (to which the nerves of the diaphragm and intercostal muscles belong) being capable of its functions, independently of the brain, yet, on the removal of a part of the brain—the medulla oblongata—respiration ceases. This difficulty he acknowledges he sees no means of removing; calling it, 'Un des grands mystères de la puissance nerveuse, mystère qui sera dévoilé tot ou tard, et dont la découverte jettera la plus vive lumière sur le mécanisme des fonctions de cette merveilleuse puissance.'

The foregoing errors, we shall find, invalidate all the inferences of M. le Gallois and the committee, with the single exception of the heart being under the immediate influence of the spinal marrow, and leave him the discoverer of certain highly important, but unconnected, facts, instead of the author of a new system, founded, as the report alleges, on a basis never to be shaken.

The experiments of M. le Gallois, indeed, by ascertaining some very valuable facts, while others immediately connected with them escaped his observation, left the subject in greater confusion than he found it. Instead of removing the difficulties which formerly existed, the additions he made to our knowledge have shown us others.

The heart's being subject to the passions yet independent of the brain, on which so much has been written, does not present a greater difficulty than that the destruction of the same part of the spinal marrow should, according to the way in which it is effected, either destroy the function of the heart, or little, if at all, influence it.

Why, if the power of the heart depends on the spinal marrow, as it appears to do from the experiments of M. le Gallois, the accuracy of which I have ascertained by repeated trials, have foetuses been born alive where no spinal marrow had ever existed?—and why does the heart continue to perform its usual motions after it is removed from the body?

Why, if the various organs of involuntary motion bear the same relation to the nervous system, is the function of the heart uninfluenced by decapitation, and the functions of the stomach and lungs impaired even by dividing or throwing a ligature around the eighth pair of nerves in the neck?

Why does respiration cease on the destruction of the medulla oblongata, the nerves of the muscles of respiration arising from the spinal marrow, which M. le Gallois has shown to be capable of its functions independently of the brain?

These apparent contradictions, it is evident, as well as those which existed before the discoveries of M. le Gallois, must be reconciled before we can understand the general laws of our frame. The doctrines which cannot reconcile them must be erroneous.

Such was the confused state of our knowledge respecting the general laws of the animal economy at the time I commenced a very laborious set of experiments, which have not been the task of a few months or years, but, with interruptions, of the greater part of not a short life; the detail of which, with the more immediate inferences from them, the reader will find in the third edition of my *Inquiry into the Laws of the Vital Functions*, and eleven papers published in the *Philosophical Transactions* since 1814; the seven last of which have since been republished under the title of *An Inquiry into the Nature of Sleep and Death*; and whatever may be said of the results of this investigation, I believe I am correct in stating that more time and labour have been bestowed on it than was ever before devoted to any single physiological inquiry; which will easily be believed by those acquainted with such subjects, when they compare the number of published experiments with those which must have been made, according to the proportion which, on such subjects, the published usually bear to the unpublished experiments.

Nor has the undertaking been free from many discouragements, for few will be at the trouble to follow the inquirer in so protracted an investigation with even a moderate degree of accuracy, although all are ready to give their opinion of his labours. In proportion as the inquiry necessarily becomes complicated, the trouble of keeping pace with it increases; and what the critic does not understand, it is more agreeable to him to ascribe to the inaccuracy of the author, than his own carelessness and want of information. I hope I may be excused for taking the present opportunity of thus making a general reply to a certain description of writers, whose criticisms betray them, and that to such a degree, that sometimes, in the very quotations they give, the intelligent reader finds a reply to their censures; for such all must encounter who assail, whether correctly or not, long-established opinions. But I have not been without my defenders, and such as might well encourage me to proceed.

It is evident that our knowledge of the general laws of the animal economy must be freed from the various sources of confusion above pointed out, before any successful application of it to the practical part of our profession can be made.

I am now to consider how far this has been effected by the inquiry just referred to, and it will form the best introduction to what I am about to say to point out the proofs of the errors above detailed. We shall thus be led to consider the results that seem to remove the many difficulties which beset the subject, and to the practical application of the principles deduced from experiment, the chief basis of all physiological knowledge, as their practical application is at once the measure of their utility, and the best proof of their soundness.

(To be continued.)

THE

London Medical and Surgical Journal.

Saturday, May 30, 1835.

PROSPECTS OF MEDICAL REFORM.

As the question of medical reform may now be considered postponed for some months, it may be as well to take a review of what the great body of practitioners have been doing in furtherance of their object since it was first moved.

For our part we feel somewhat astonished that so little feeling has been shown by the great mass of general practitioners concerning a matter which so nearly touches their interests. When the rights and privileges of other bodies, professional or trading, have been the subject of discussion, no lack of energy has been displayed by the members of such bodies in arguing or advocating their cause. To the medical world alone remains the unenviable distinction of appearing indifferent and apathetic to circumstances calculated to arouse the spirit and exertion of all else. Have our profession held any meetings to forward their cause? have they organised themselves so as to ensure a fair representation of their case in the House of Commons? or have they

taken those precautions which in ordinary affairs are taken by their fellow subjects? No: they have done neither. And, were it not that the medical journals have done *their* duty, and insisted from time to time upon the necessity of a thorough revision of the laws which govern our preposterously divided institutions, they might sleep on to eternity without amendment. It is not too late, however, to adopt a more energetic system, and to exhibit more actively the capabilities which we have too long suffered to lie dormant. To say that there is not sufficient talent and power among our brethren to organise and discipline themselves for the purpose of mutual advantage, is to brand them with an unworthy aspersion. The will alone is wanting, and when that is supplied we feel satisfied all the necessary adjuncts will follow.

What we would impress upon our professional brethren is the necessity of forming reunions among themselves for their mutual benefit and advantage. Every other public body, when its welfare or interest is in dispute, forms an association or company for the purpose of advancing its cause and ensuring its prosperity. Mutual protection is sought by combination, and the effort of numbers produces that result which the exertions of a few could never achieve. The general practitioners have too long kept asunder; forming as they do a very considerable portion of the community, no bond of union has hitherto bound them together: they have been oppressed because they have been divided. Their complaint has been unheard because its sound was too feeble to create that sensation which it deserved, and which would be quickly excited were its voice expressed in louder tones. Co-operation is the only remedy, and the opportunity of effectually com-

bining is now offered during the interval which must elapse before the question of medical reform can come before the legislature. Those who are careless of the result, who view it as a matter of indifference, may assert that the merits of the case have been sifted before the Medical Committee in the House of Commons, and that *therefore* a due measure of reform will be awarded; but there are many steps to be taken, and many stumbling-blocks to be passed over, before any such consummation can happen. Opposition in various shapes from the corporations now in power will present its front at every turn to the principles of *real* reform; and if our legislators perceive that we, as a body, are lukewarm in our endeavours to obtain a *radical* amendment of our corporate laws, they will also look coldly on the subject, and in all probability try some experiment on our patience, which, although it may be termed reform, will come far below our wants and expectations.

We trust that such of the general practitioners as feel themselves aggrieved by the present state of the law with regard to our profession, who are perplexed by its contradictory enactments, burthened with extensive responsibilities, and harassed by corporate privileges, will take the counsel we now offer, and call meetings to discuss the subject of their difficulties, and form arrangements for their removal. Let those in the metropolis commence the work, and their example will be quickly followed throughout the country. Unanimity will then be established, and the opinion of the great body of medical practitioners find its way to that quarter where it is essential that it should be properly appreciated.

Medical reform must now become the watchword with every general practi-

tioner who wishes to ameliorate his condition, and to escape from the trammels which have hitherto lessened both his rank and utility. The measure of that reform will depend greatly on his own exertions. If supineness and apathy characterise his movements in the cause, a proportionate loss of advantage will accrue. The three corporate bodies who lord it now over the profession are wide awake to their *own* interests, and possess influence which, unless counteracted, may tend to keep things very nearly in the state they are. It is true, as far as we can discern, that the investigation before the Committee in the House has gone almost entirely in favour of reform of *some* kind, but the amount remains yet to be ascertained, and upon the expression of the feelings of the great majority of medical practitioners will that depend. The advocates of things as they are have made but a pitiful figure in their examinations before the Committee; in fact they broke down, and are now only awaiting that *coup de grace* to which we earnestly hope our brethren will not be slow in treating them.

In the meantime, as objects of discussion, should meetings of the profession take place before the next session of parliament, we would recommend the following:—first, the establishment of one central board for the purpose of regulating the whole of the profession throughout the British empire. Secondly, uniformity of education, both preliminary and professional. Thirdly, the power of recovering fees for medical attendance, at the same time making it optional with the practitioner to charge for either attendance or medicine, or both conjointly; and, fourthly, to endeavour to place the appointment of medical officers to public hospitals, and other similar establishments,

upon a more just and equitable footing than is the case at present. These are a few leading features in medical reform which will afford ample room whereupon to exercise the sagacity and acumen of all its well wishers.

QUACKERY AND ITS ENCOURAGERS.

WHEN, in a leading article of a late number, we condemned the tricks to which empirics and their coadjutors had resort, we little thought of the inundation of exculpatory letters which these gentry have since chosen to pour in upon us; some of them we have read, and all we have burnt. According to these vagabonds they are *all* honest men and true—all instigated, not by a love of gain, but by the purest motives; philanthropists of the first water—men going about to seek where they can do good without any hope of reward. There is not one of them who does not pity his own case, and deplore the blindness of the public. Each quack is, in his own estimation, a martyr. *This* fellow has invented pills which, if people would but swallow them, would ensure their health for a century to come; and *that* ragamuffin has an elixir which he impudently enough sends us a bottle of to taste. Another forwards us a long letter with a prescription tacked to it, which has been approved of by an “*eminent man*,” while a fourth talks away in good round terms of the excellence of his British spirit, and of the quantity of it which his *puffing eminent man* has contrived to pour down his throat. We feel heartily sick of the pretensions of these humbugs, and ashamed of their abettors, and shall, for the future, take every opportunity to castigate and expose them. We must not forget that one who *was* an “ORIGINAL,” but who has lately put that mark of dis-

inction into his pocket (he knows why) is very angry with us for taking quackery by the beard as we have done. He, conscientious fellow, would not refuse his approbation to brandy of *any* kind, so that it could be obtained for *nothing*, or what is, it must be confessed, only a *shade better* than nothing, *his puff and sanction*. He tosses and tumbles to such a degree beneath the scourging we have administered to *him* in common with his brother malefactors in the puffing way, that if we did not thoroughly despise, we could pity him.

KING'S COLLEGE.

ON our examining the “Report presented by the Council to the General Court on Wednesday, the 29th of April,” for the present year, we are happy to find that every department of their general tuition is on a rapid increase. Many additional departments have in consequence been fitted up; and their object is still to further enlarge, particularly the department set aside for the museum. Specimens of all descriptions appear flowing in; every lover of science appears anxious to contribute his mite, so that his name might hereafter be preserved in a building where there is not much prospect of its foundations being overturned. The number of medical students that attend for the acquirement of the many various branches necessary for their education, amounts to as many as 217. Thus institutions, founded both for the love of morality and the advancement of science, are certain, by steady perseverance, to reap all the benefits of which their founders are so well deserving.

MEDICAL DEPARTMENT.

The distribution of prizes to the successful candidates took place here on Saturday last. The large theatre was crowded with spectators long before the time at which the business of the day was appointed to commence.

At two o'clock, the Bishops of London and Winchester, the Members of the Council, the Principals, and the Professors, entered the theatre. The Bishop of London took the chair in the absence of the Archbishop of Canterbury, whose attendance was prevented by his having been called to preside at a meeting of a different kind. The usual introductory observations having been made, Professor Mayo addressed the chairman upon the prospects of the medical school, which he

said had continued to improve, from the period of its establishment up to the present time. He adverted to the peculiar system upon which it was conducted, that of combining with professional religious and moral instruction, and to the difficulties which such a system was calculated to entail. Those obstacles, he was gratified to state, were already fast diminishing. Theoretical objections were yielding to practical results, and many who had once been opponents from *prejudice*, were now numbered in their ranks, supporters upon *principle*.

With regard to the students themselves, he had noticed with pleasure and with pride, that the spirit of study and of application had undergone a marked increase among them in every successive year. Whether the gradually augmented severity of the annual examinations had inspired an emulation more vigorous in proportion, whether the limited number of the testimonials awarded had produced the desired effect of raising their value, or whether the efforts of his colleagues and of himself to elevate the tone of medical education were already receiving their reward in success, he would not then attempt to decide, but such was the fact; no former session had shown so much general diligence, and so much individual ardour in the acquirement of professional knowledge, as had been exhibited in the classes of this year, and from the high standard which had thus been attained, he trusted, and he expected, they would never retrograde.

We have not space for the remainder of the Professor's remarks, although they were as satisfactory and as interesting as the preceding. He concluded by reading the motto of the successful candidate in his department, Mr. H. Gee (a gentleman whose youthful appearance added to the honour of his success), as also the devices of those to whom certificates of honour were adjudged. Professors Partridge, Burnett, Daniell, Watson, F. and B. Hawkins, Ferguson, and Green, announced successively the mottoes of the successful candidates in their several classes, and confirmed Mr. Mayo's remarks upon the increasing diligence and proficiency of the students. Mr. Daniell, in particular, stated that the knowledge of chemistry evinced by his class at the periodical examinations during the session, had justified him in selecting for the prize examination twenty-five of the most difficult questions which the whole range of chemistry and the collateral sciences could furnish; that of these questions every one had been answered by the three first candidates (with one trifling, and indeed accidental, exception), and that so hard run had been the race, that the eminent chemist to whom he had left the valuation of the papers, had estimated the first at 800, and the second at 750. He then craved the indulgence of the meeting while he read from the paper of the successful candidate a little tribute to Professor Faraday, with the enthu-

siasm of which he had been equally amused and gratified, and in which he was sure all who heard him would heartily join. To the question, "What is the origin of the Voltaic force?" the following is the commencement of the answer which this gentleman, Mr. Ward, returned.

"The Voltaic force was supposed by Galvani to reside in the brains of animals, by Volta, to be produced by the contact of different metals; by Wollaston, to be dependent upon the oxidation of metals; by Davy, to *begin* with metallic contact, and to be *continued* by chemical action; but Faraday—glorious fellow!—has finally proved, beyond a doubt, that it *begins* with chemical affinity, that it *goes on* with chemical affinity, that it is strictly *proportionate* to chemical affinity; nay more, he has gone far towards proving that it is IDENTICAL with chemical affinity."

The motto was then read, and the medal delivered by the Bishop, amidst much applause.

We have already exceeded our limits, and must content ourselves by observing that the speech of Professor Green, which represented the exertions of the prelates of the church in support of this institution as their solemn duty, was, in our estimation, highly impressive and manly; that the department of the right reverend chairman towards the students was most urbane and condescending; that his remarks on the mottoes, &c., were full, sometimes of ready wit, sometimes of good advice; that his concluding address, in reply to Principal Otter's report on his theological class, was most appropriate and instructive to the students; that to a vote of thanks, moved by Lord Brownlow, seconded by the Bishop of Winchester, and carried by acclamation, he briefly returned his acknowledgments, and that the meeting separated (if there be truth in physiognomy) with feelings of high gratification.

We subjoin a list of the successful candidates, and of the testimonials they respectively received.

Anatomy.

Silver Medal—H. Lee.

Certificate—T. G. Whitfield, R. Jones, C. Vines.

Practical Anatomy.

Silver Medal—R. Jones.

Certificate—H. Lee, W. Trew, F. J. Whitfield.

Botany.

Silver Medal—G. R. Carter.

Certificate—C. J. Cox, J. D. Campbell, W. H. Thornthwaite.

Chemistry.

Silver Medal—F. O. Ward.

Certificate—J. Wilson, W. Gerard, A. Sence.

Materia Medica.

Silver Medal—R. Druitt.
Certificate—G. R. Carter, A. V. Dennis, H. Payne.

Medicine.

Silver Medal—J. Challice.
Certificate—E. L. Muller, G. R. Carter, G. Smith.

Forensic Medicine.

Silver Medal—F. F. Whitfield.
Certificate—J. Simons, F. Cox, G. R. Carter.

Midwifery.

Silver Medal—J. Simmons.
Certificate—R. Keen, T. T. Whitfield, F. Cox.

Surgery.

Silver Medal—W. B. Whitfield.
Certificate—G. R. Wyatt, C. Vines, F. W. Pittock.

The Leathes Prizes.

A. V. Dennis, J. P. White, Taylor.
Certificate—H. Hensley.

DELIVERY OF PRIZES AT ST. BARTHOLOMEW'S.

Wednesday, May, 13.

Medicine.

Prize—James Paget, Yarmouth.
Certificate—R. H. Meade, Bedford; G. Lowdell, Brighton; and T. Taylor, Blackfriars.

Chemistry.

First Prize—J. Paget, Yarmouth.
Second Prize—J. W. Hott, Bromley, Kent.
Certificate—C. Stevens, Oxford; F. A. Laking, Wilton Place, Belgrave Square; W. W. Whitney, Bath; and Joseph Kinnear.

Clinical Medicine.

Prize—R. H. Meade, Bedford.

Surgery.

First Prize—J. Paget, Yarmouth.
Second Prize—R. H. Meade, Bedford.
Third Prize—G. D. Hedley, Bedford.
Certificate—T. Wilson, Congleton; C. A. Hawkesworth, Barton-under-Needwood; Staffordshire; J. V. Torcade, Belfast; and Thomas Haynes.

Clinical Surgery.

First Prize—C. A. Hawkesworth, Staffordshire.
Second Prize—T. Wilson, Congleton.
Certificate—G. Davies, Dolgelly, North Wales.

Anatomy.

First Prize—W. J. Square, Plymouth.
Second Prize—G. Lowdell, Brighton.

Third Prize—J. Brigham Barsham, Cambridge.
Certificate—J. R. Quick, St. Mawe's, Cornwall.

Practical Anatomy.

Prize—L. Holden, Lincoln's Inn Fields.

Midwifery.

First Prize—C. West, Amersham, Bucks.
Second Prize—J. B. Barsham, Cambridge.
Certificate—A. W. W. Franklin, Wincanton, Somerset; W. Acton Shillingstone, Blandford, Dorset.

Materia Medica.

Prize—M. Nightingale, Bedford-row.

Forensic Medicine.

Prize—C. West, Amersham, Bucks.
Certificate—T. Wilson, Congleton.

Botany.

Prize—J. Paget, Yarmouth.
Certificate—R. H. Meade, Bedford.

Comparative Anatomy.

Prize—W. W. Cooper, Bath.

Foreign Medicine.

Ulceration and Perforation of the Heart.

AN instance of this is recorded in a late number of the *Lancette Francoise*. The subject of this case was a female, 51 years of age, admitted into the Hôtel Dieu on the 8th of March last. She exhibited some obscure gastric symptoms, and could very imperfectly describe either the nature or seat of her complaints. Her tongue was pale and slightly furred; *her pulse regular*, rather more frequent than natural; bowels inactive. Her disorder appeared so slight that little attention was paid to her. Eleven days after her admission she suddenly died. A short time previous she had been tranquilly conversing with her neighbour, and did not make any complaint of pain or unusual uneasiness.

On examination of the left ventricle it was found perforated at its posterior and middle part by an ulcer, or apparently two ulcers, one commencing internally, the opposite to it externally; at least the shape of the hole gave that idea, it being larger externally and internally than in the centre, and therefore presenting an hour-glass figure. The fleshy substance of the heart was not softened, except for a short distance around the ulcers. Thick, red, fibrous layers were found on both surfaces of the heart. The heart was enlarged, but without any thickening of its parietes. The ventricular valves and orifices of the vessels were normal.

Combination of Nitre and Calomel.

M. Burdach states in a recent German

journal, that the addition of nitrate of potash prevents calomel from producing salivation, the nitre causing its prompt expulsion by stool. This combination he also asserts to be a powerful derivative, and relieves the head, the chest, and the liver, more effectually than either of them will do separately. Certain diseases, as hydrocephalus, croup, &c., he adds, require large doses of calomel, and if this medicament is not eliminated from the system, it becomes a poison; the addition of nitre prevents this unfortunate result.

Mechanism of the Human Voice during Singing.

M. Bennati some time since communicated to the Royal Academy of Sciences of Paris a memoir on this subject. The following report exhibits an excellent analysis of this interesting paper.

The intention of the memoir is to make known the part performed by the velum palati, or rather the strait of the throat formed by the velum palati, its arches, and the base of the tongue. We are aware that of the physiologists who have studied the organ of the voice, some have compared it to a stringed instrument, others to a reed instrument. M. Savart has compared it more happily to a kind of bird-call, and has established that the two ligaments of the glottis, and the ventriculi which separate them, take an essential part in the primitive formation of the voice. He has shown, at the same time, that the nature of the walls of the mouth, its internal configuration, and the more or less of tension of the parts which form it, concur in modifying the primitive sound, and can more especially lower it by means which do not consist in the greater or less elevation and depression of the larynx, taken in its totality. M. Savart has not, however, paid attention to the special use of each of these parts, neither has he attended to that of the velum palati. In general, little attention has been paid to this second strait, through which the air which produces the voice is obliged to pass. Fabricius, of Aquapendente, had, nevertheless, remarked its importance, after having shown that the voice is formed at the larynx, after having made known the relations of elevation and depression of the larynx, and, in consequence, the variations in length of the buccal cavity. This illustrious anatomist also described the variations in width that the same organ undergoes in passing from grave to sharp sounds. Ferriën, long after, appears to have attended to the same considerations, and to have gone further than Fabricius; for, in terminating his memoir on the voice, he says, that the chordæ vocales are not the organs of every kind of voice; that a certain guttural intonation, and a false treble of the same nature, are produced by a new organ, the existence of which he has declared, and which he proposes to make known in a new memoir. The promised memoir never appeared, and thus we know not what organ he

intended speaking: Haller has supposed it to be the velum palati, but, however, he has not said in what manner this organ concurred in forming the voice.

In a thesis sustained at Tubingen, in 1781, M. Hellwag stated, that in the false treble the uvula contracted, whilst it did not change its shape in the ordinary tone. This is, we believe, all that has been said hitherto of the part the velum palati plays in the production of the voice, before the appearance of this memoir. M. Bennati, who joins to the skill of the physician great exercise in the art of singing, and who has one of the finest voices we know of, has paid particular attention to these motions: he has ascertained that the tongue itself, in elevating and depressing itself, or in forming itself into a hollow, exercises a powerful influence on the modulations, and that, in order that the larynx may give any tone, it is necessary that the os hyoides be firmly fixed in a determined position. He has, besides, recognised that the notes improperly called *de la tête*, and false treble, are formed almost exclusively by the labour and the strongest contraction of the superior part of the vocal canal. He names them, in consequence, *super laryngeal*, and calls their union the *second register*, to distinguish them from the notes said to come from the *chest*, and which he had rather call *laryngeal*, and their *ensemble* the *first register*. He does not mean to say by that, that the larynx does not aid in forming the one, or the throat the other; but he wishes merely to show the more essential part that the throat takes in forming those of the *second register*. In regard to the *third register*, of which some works on singing speak, he regards it as imaginary, and owing simply to the vibration, more or less powerful, of the last notes of the first, and of the first notes of the second. Those singers whose voices are composed of *two registers*, have need of more art to manage the transition from one register to the other, so as to unite them in the ear, and are more easily fatigued than others.

Corrector of Opium.

According to M. Puchelt, a German physician, the sulphate of soda is an excellent corrector of the unpleasant effects of opium, given in the proportion of a scruple to half a grain of opium. This dose may be repeated two or three times a-day. In combination with Glauber's salt, opium, he says, may be administered in cases where slight plethora, local or general, prevents recourse being had to opium alone. In obstinate hæmorrhages, principally, this mixture will produce the happiest effects. But if sulphate of soda prevents the congestion which opium sometimes produces, M. Puchelt says that there is another article which corrects its narcotic, without diminishing its sedative, effects—this is the castor. The combination of opium and castor he considers very useful in cases of hysteria.

Asparagus as a Sedative.

The *Gazette Medicale*, of the 21st of May last, contains a memoir by M. Eusebe de Salle, on this subject. The attention of the profession was first called to the sedative properties of asparagus by M. Broussais about two years since. The diuretic property of this vegetable is known to every one; M. de Salle attributes to it another, which we confess never to have observed. He says that it excites, in persons whose larynx is susceptible, in half an hour or an hour after it is eaten, a violent constriction of the throat; there is a considerable irritation of the larynx, and the glottis has a tendency to spasmodic contraction. This painful state ordinarily ceases in about twenty minutes. For a knowledge of its calming property, we are indebted to a gentleman, not of the profession, affected with a chronic irritation of the heart, and who observed that he suffered much less after eating asparagus. As this vegetable could be obtained but for a short season, this gentleman applied to M. Johnson to prepare for him a syrup, which he might take when the plant was not to be procured. M. Johnson, anxious to obtain, in an isolated state, the active principle of the vegetable, undertook, with the aid of MM. Vauquelin and Robiquet, its analysis. He ascertained that the constituent principles of the asparagus, are asparagine, a green resinous matter, wax, albumen, phosphate and acetate of potass, and, finally, mannite. Upon experiment, the asparagine was found diuretic, but not sedative, and the green resin slightly sedative; the combination, however, of the asparagine and the green resin was found most efficacious.

The following is the method of preparing the syrup of the asparagus employed by M. Johnson:—Take eight pounds of asparagus, cut it in small pieces, bruise it, and express the juice by a strong pressure. Evaporate the juice to a syrup consistence, then allow the asparagine to crystallise; decant, and again evaporate the liquid to a dry extract.

Take the green part of the asparagus shoots, and macerate them for fifteen days in half their weight of alcohol, at 22°. Express, and take enough of it to entirely dissolve the dry extract; when the extract is dissolved, evaporate, to remove from it the alcohol. Use this to dissolve the asparagine, and then make the syrup.

We hope that some of our pharmacists will undertake to investigate the active principles of this plant, and the best mode of obtaining it, and will form a preparation of it, to enable physicians in this country to determine its therapeutic properties. If it really possesses those attributed to it, there are many cases in which it is calculated to afford important relief. M. de Salle relates two cases of distressing palpitation of the heart, in which the most manifest relief followed its administration.

British Hospital Report.

WESTMINSTER HOSPITAL.

Amputation.

SUSAN CLARK, *ætat.* 27, residing at Epping, was admitted February 24, 1835, into Queen Anne's Ward under Mr. Guthrie. For the last five years she has laboured under extensive ulceration of the left leg, which has baffled all the remedial measures which had been employed, and also materially affected her general health, and she accordingly entered the hospital with the intention of parting with the limb. About seven months since the foot became considerably inverted, and the tibia has taken a similar curve inwards. She says that on no occasion have any portions of bone separated.

The limb was removed by Mr. Thomson, the assistant-surgeon, on the 7th of March, by the circular incision; three ligatures were applied. She suffered severely from pain in the stump for the remainder of that day and part of the night, but which afterwards subsided, and she did very well, though the part was a long while healing, in consequence of the ligature not separating in due time. The first came away sufficiently early, about the fourteenth day; the second in three weeks; and the third not until the fifth week, and even then it required a little traction to disengage it.

New Truss for Prolapsus Recti.

A short time since there was a female patient in one of the wards under the care of Mr. W. B. Lynn, who, in addition to her other complaints, laboured under prolapsus recti. In the hope of alleviating her sufferings, Mr. Lynn caused an instrument to be made which should support the prolapsed mucous membrane. It consists of a strap which encircles the loin, and is fastened in front, having an elastic spring, which passes between the buttocks, and applies itself directly against the anus, and has at its extremity an ivory knob or projection, which serves to keep up the prolapsed gut.

EFFECTS OF TEA.

STRONG tea, drunk in very considerable quantity in a morning, especially if I eat little bread with it, generally makes me fainter before dinner than if I had taken no breakfast at all; at the same time it quickens my pulse, and often affects me with a kind of giddiness. These bad effects of tea are most remarkable when my stomach is out of order.

DR. WHYTT.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on 30th April, 7th May, 14th May, and 21st May, 1835:—Edwin Edmonds, John Phillips, George M'Knight, John Henry Clark, John Cordy Burrows, Samuel Richard Jeffreys, Henry Keate, John Rowland Pottle, Jas. King Walter, Joseph Adam, Thomas Alexander Richards, William Ed-dowes, Gordon Gwynne, William Blamire Inman, John Dawson, Wm. Underwood Whitney, George Harrison, Walter Scott, George Newman, Charles Henry Povey, David Lawrence, Francis Sibson, James Martin Crook, George Beddow, James Orwin, Thomas Dawson, Edmund Jones, George Oldham, Arthur Stilwell, Edm. Williams Hamp-ton, John Nicholls Stevens.

MISCELLANEOUS.

Meeting of the Medical Profession.—A meeting of the members of the medical profession took place on Thursday last, at twelve at noon, at the Fountain Hotel, Canterbury, "to consider what steps ought to be taken in consequence of the de-graded terms for attendance on the sick poor, proposed to medical men under the new Poor-Law Act." Dr. Harry Carter was called to the chair, and submitted that, though the parties who had arranged the terms of contract might be well acquainted with the system pursued as regarded meat, flour, vegetables, and other domestic things, they could form no judgment as to the remuneration which the medical profession ought to receive, unacquainted as they were with the price of medicine, and the anxiety and trouble frequently consequent on its administration. There was no question, if Sir Francis Head's situation as Assistant-Commissioner at £1000 per annum, with £75 a-year for a clerk, and his travelling expenses were to be contracted for, that many persons might be found who would fulfil the duties of the office with equal satisfac-tion, and at three-fifths of the salary. Several res-olutions were then proposed, inveighing against the terms offered, and pledging the meeting to refuse submitting to the contract price. After which, a deputation was appointed to wait on the Chief Commissioners, to endeavour, if pos-sible, to effect a satisfactory arrangement. There was a numerous attendance of the profession from all parts of East Kent. It was stated that in only one instance had the terms been ac-ceded to.

We are glad to find, from the printed copy of Mr. Cripps' and Mr. Warburton's Coroners' Bill, that it is intended to give a fee, not exceeding one pound, to professional gentlemen summoned to give evidence before coroners' inquests. We shall give the clauses in full next week.

University of Edinburgh.—Hope Chemical Prize.—Some years ago, Dr. Hope, Professor of Chem-istry, presented to the Senatus Academicus the sum of £700, as a fund to furnish annually or biennially a prize for the encouragement of ex-perimental chemistry among the students of the University. Two years ago, it was announced that a prize of sixty sovereigns, ten of which were to be employed in providing a gold medal, would be given in April, 1835, for the "best collection of specimens of iodine and bromine, and of the various compounds which they can form, accom-panied with an account of the chemical characters and chemical properties of the different sub-stances, and of the processes by which they were procured." Two collections only were trans-mitted in competition for the prize. Professor Hoje, Professor Christisor, and Professor Trail, after due examination, found them both to pos-sess much merit, but a merit so perfectly equal, that they could not give a preference, the one

having a superiority in the preparations of iodine, and the other of bromine. The professors were of opinion that the prize should be equally di-vided between the competitors, and that a gold medal and twenty sovereigns should be allotted to each. Upon opening the sealed letters, the competitors were found to be Dr. James Inglis, from Glasgow, and Mr. Alexander Anderson, from Tullymett, Perthshire. On the 29th ult., Dr. Hope terminated his course of lectures by an-nouncing the result of the competition, and con-gratulating the young gentlemen upon their suc-cessful exertions. The professor at the same time stated that the programme for the next prize would be made public immediately.

WEEKLY BILL OF MORTALITY.

London, Tuesday, May 26, 1835.

Abscess	2	Hæmorrhage	2
Age and Debility	42	Heart, Diseased	2
Apoplexy	6	Hooping-Cough	10
Asthma	17	Inflammation	32
Cancer	1	Inflammation of the	
Childbirth	2	Bowels & Stomach	3
Consumption	91	Inflammation of the	
Constipation of the		Brain	4
Bowels	1	Inflammation of the	
Convulsions	28	Lungs and Pleura	3
Croup	1	Liver, Diseased	6
Dentition, or Teeth-		Measles	18
ing	7	Mortification	5
Dropsy	11	Paralysis	6
Dropsy on the Brain	2	Small Pox	14
Dropsy on the Chest	2	Spasms	1
Erysipelas	3	Stone and Gravel	2
Fever	3	Thrush	1
Fever, Scarlet	5		
Fever, Typhus	2		
Gout	2	Stillborn	26

Buried, Males 191 Females 199 Total 390

Increase in Burials reported this week, 22.

CORRESPONDENTS.

Originals.—We have to thank him for his re-marks. The *Milesian Hippocrates* has indeed abandoned his *soubriquet* of "ORIGINAL," and, after having been pretty keenly hunted, taken refuge behind his *original* obscurity. His utmost sale of pamphlets, we shrewdly guess, does not exceed one hundred per week, and it reflects no small credit upon his *trading* tact, that he is able to dispose of even that number, considering the miserable trash with which he *impregnates* them.

Inquirer.—Seven mortal pages of our quondam ORIGINAL's last number are filled with a hazy translation of formulæ which are not worth read-ing; five others are devoted to *puffing himself*; and having thus absorbed nearly one-half of his pamphlet in what concerns nobody but himself or some similar "*Original*," he very quaintly winds up by an attempt at criticising the labours of others. Verily he is a cock that can crow at all hours, albeit his crowing may help to display the unfeathered state of his carcase.

Press of matter compels us to postpone the Ap-pointments, Resignations, &c., until next week.

Erratum.—In last number, p. 540, col 2, line 1, for "gain, speculation," read "dim speculation."

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE XIV.

GENTLEMEN—There is at present in the hospital a man whose case has been marked imperfect or (to use a better phrase) incomplete amaurosis. He has been complaining at different times during the past year, and for the last six months his vision has been very weak, with the exception of occasional intermissions. He can perceive objects tolerably well with the right eye, but scarcely at all with the left, and in both vision is more or less dim and imperfect.

On examining this man's eyes, you cannot discover in either of them the slightest perceptible defect as an optical instrument. The deficiency of vision, therefore, does not depend on opacity of the cornea, on disease of the lens or its capsule, or on any affection of the aqueous or vitreous humours; it is simply an impairment of the vitality of the organ, connected with functional disease of the retina. Having thus satisfied ourselves as to the seat and nature of the disease, we come next to inquire into its cause and origin. From a careful examination of the man's state of health, we can have no doubt on our minds as to whether the amaurosis in this case has been produced by derangement of the stomach or not. You are all aware that the celebrated Richter has long since shown, that functional disease of the retina is often connected with a deranged state of the alimentary canal, and that it may be treated successfully with emetics and purgatives. Here, however, we have no evidence of the existence of congestion or derangement of the stomach and bowels. The man's appetite is good, his bowels regular, and his health robust. But when we come to examine the head, we find evidence of cerebral congestion sufficient to account for the functional lesion of the optic

nerve. Our patient has been a long time complaining at different periods of a sense of fullness in the head, and is subject to attacks of vertigo while walking, causing him to stumble occasionally, and labour under frequent apprehensions of falling down in the street. He prefers walking along the middle of the street to either side, and says that he is always worse when he attempts to walk along the flagway. This is an ordinary symptom observed among persons who have a tendency to vertigo; they are frequently made worse by the operation of causes in themselves apparently inconsequential, and the nature of which we cannot well understand. You are aware that in many persons the act of looking for any length of time at objects moving rapidly in a straight line, and still more in a circle, has a tendency to produce giddiness. Thus looking out of the window of a steam carriage on the objects apparently moving backwards with great velocity, or looking over a bridge at the current of a rapid river, or gazing at a person whirled round in a gyrating swing, is very apt to give rise to vertigo. Again, persons labouring under a morbid sensibility of the brain very often become giddy from looking at a succession of objects moving with much less rapidity. Hence you will find such persons made giddy by walking through a crowded city, and having a number of persons pass by them on the flagway, and they seek for an opportunity of getting into the middle of the street to avoid meeting so many objects. I knew a person who could never pass by a line of railing with any degree of comfort; if he happened to look at them as he moved by, he became almost immediately vertiginous. Giddiness is also generally produced by looking down from a great height in a vertical direction, or by looking upwards, provided the object be immediately overhead and at a great distance. Under these circumstances, most persons experience a feeling of vertigo, no matter what their position may be at the time. There seems to be little doubt that the sensation of giddiness does not depend merely on the distance or position of the object looked at. It would appear that in general some continuous communication must exist between

that object and the spectator. Thus we feel giddy when we look down from a precipice at something below, or when standing beneath the dome of St. Peter's or St. Paul's we regard with attention the vaulted structure above; but we do not feel giddy when we look down from a balloon, or look upwards at the moon or stars near the zenith. It has not been sufficiently remarked by writers, that persons subject to vertigo are often almost as much affected by looking upwards as by looking downwards. Persons who are inclined to vertigo will also become giddy by directing the eye with a fixed attention for any length of time to the one object, such as continuing to look in a straight line, or endeavouring to direct the course of their movements along a plank or narrow pathway. These circumstances are all very difficult to explain, and I bring them forwards merely as illustrating the fact of this man's preference for walking in the middle of the street.

In this man, as you may have perceived, we had several circumstances calculated to direct our attention to the state of the brain as connected with the impairment of vision; besides vertigo and a tendency to stumble in walking, he had flashes of light before his eyes and other luminous hallucinations, with tinnitus aurium on one side. With respect to the flashes of light before the eyes, I may observe that they may be produced by the operation of various causes; a blow or pressure on the eye will cause them, they may arise also from a particular state of the arteries which supply the optic nerve, and thus at each pulsation of the heart a flash of light is seen. This morbid sensibility of the retina, which under such circumstances appears to be itself the source of light, is very often a symptom which ushers in the extinction of the visual power. It is a very general remark that hypersensibility of an organ is but too often the prelude to total loss of its functions. Thus we frequently have a morbidly sensitive state of the eye before it becomes incurably amaurotic, a morbid sensibility of the ear ushering in loss of hearing, and unnatural excitement of the sense of touch preceding paralysis. But in this case we have not only an irritable condition of the retina, but also an affection of the pupil; the iris is sluggish in its motions, and this symptom occurring at this particular period, combined with the vertigo, luminous hallucinations, and gradual but steady progress of the disease, give us some reasons to apprehend that it will end in complete amaurosis. Seeing, however, that the symptoms have originated in a congested state of the brain, it is our duty as far as possible to check its progress. This is to be done by cupping over the nape of the neck, leeching the temples and behind the ears, and acting on the bowels by brisk purgatives. With the same view, I intend to insert a seton in the nape of his neck, and to administer the nitrate of silver internally, com-

bined with a small quantity of aloes, a remedy which is possessed of some valuable properties in the treatment of chronic congestion of the brain, whether tending to produce amaurosis or headach.

With respect to the causes of amaurosis, I may observe, that they depend either on disease of the brain, as congestion, inflammation, the presence of tumours of various kinds, or on injuries of the retina itself or of the supra and infra orbital branches of the fifth nerve, or on affections of the alimentary canal. All these matters, however, have been so well detailed, particularly in the excellent article on amaurosis, by Dr. Jacob, in the *Cyclopædia of Practical Medicine*, to which I refer you, that I shall pass over them at present, and close my notice of this case with a few desultory remarks. I believe I mentioned in a former lecture*, that I had seen a very curious case of amaurosis, in which the cause of the disease seemed to be connected with an impression made by cold on the facial branches of the fifth nerve. I have already taught the class, that paralysis of any part of the body may arise from an impression made not only on its own nerves, but also on the peripheral extremities of the nerves of another and even a distant part. I have also remarked that the fifth nerve is connected with the nerves of all the senses, but in particular with the optic, and hence we can explain why injuries of its supra and infra-orbital branches may bring on amaurosis. In the case to which I refer, the patient was exposed, while travelling outside on a stage-coach, to a keen north-easterly wind, and, when he arrived in Dublin, his lips were very much chapped, and the skin of his face bore evident marks of the cold and drying powers of the wind. Soon afterwards he began to complain of dimness of vision, and a thin gauze veil seemed to be extended between him and every object he looked at. After five or six days, when he applied to me, I found a considerable degree of amaurosis present, and at the distance of a few feet he was unable to recognise the countenance of a friend. He had no headach, vertigo, or tinnitus aurium; in fact, nothing to indicate cerebral congestion, and his appetite was good, sleep undisturbed, bowels regular. He had never thought himself, nor did a medical gentleman, to whom he had applied, ever suspect that the impression of cold on the face had produced the amaurosis, and he said that he had been advised to get himself leeches and cupped over the back of the neck. On examining into the cause of his disease, and having found that he had been exposed to severe cold, it occurred to me that the amaurosis might be connected with the impression made by cold on the superficial branches of the fifth nerve, and, on more accurate investigation, I found that there were some grounds for this opinion. I was further

* Lecture VII.

confirmed in this view of the subject by the details of a case communicated to me by my friend Dr. Montgomery, in which the patient evidently got paralysis of the portio dura from exposure of one side of the face to cold. Of course this paralysis was attended with distortion of countenance, in consequence of many of the muscles of the face depending on the portio dura for their supply of nervous energy. But, what was particularly remarkable in this case was, that vision on the affected side of the face became dim and indistinct. Now, can this be explained? Yes, very easily. You all know that the branches of the portio dura have an extensive communication with the supra and infra orbital branches of the fifth. Now, the paralysis which commenced in the portio dura gradually extended to the branches of the fifth, and through them to the optic nerve, with which the fifth is intimately connected, and hence it was the retina became finally deranged in its function and dimness was produced.

There is one circumstance more to which, as I am on the subject of amaurosis, I shall briefly call your attention. You will recollect the case of a boy whom we have had very recently under treatment for amaurosis, and may perhaps remember that one of the remarkable points in his case was this:—when he looked straight forward he did not see anything in the direction to which his eyes were turned, but he could see the objects that were considerably below, or to either side of, the axis of vision. There are two or three circumstances under which a person cannot see an object by looking directly at it, and I wish to state these circumstances. In the first place, it may happen that an opaque spot may be situated on the centre of the cornea and directly in the axis of vision, as we sometimes see in cases of scrofulous ulceration followed by permanent opacity of the cornea. Now, in this case it is plain that the person cannot see objects placed directly before him and in the axis of vision. The second case is one where the patient cannot see objects directly before him, but can distinguish them tolerably well at a certain angle of obliquity, the cornea being perfectly clear and uninjured in its texture. Now, this may arise from an opacity of the lens, limited to its centre, and not generally diffused through its substance. The lens is a compound body, the structure of which was, until very lately, but little known. When the lens or its capsule is affected with opacity, this opacity is not always equally diffused, but sometimes occupies the central portions of these organs, while the circumferential portions retain their transparency. Hence, when a person under such circumstances wishes to see an object, it is necessary that the rays of light should fall obliquely in order to reach the retina. A third case is, where, although the cornea and crystalline lens are in the natural state, still the patient sees objects a little removed from the axis of vision much better

than those which are in it, as in the case to which I have just alluded, where the patient could scarcely distinguish any object placed directly before him, but see tolerably well objects at either side of, or below, the direct line. The reason of this appears to be, that when a person so circumstanced looks directly at an object, the picture of the object falls on a part of the retina not obedient to the stimulus of light. In the process of ordinary vision the parts around the axis, and corresponding to the field, of vision, have the picture of the object looked at painted on them, and vividly and strongly illuminated. The central portion of the retina bears on it the picture of the object which the mind attends to, for it is surprising how indistinct and how little attended to any object seen obliquely is. Now, where disease has rendered this central portion of the retina insensible to light, then the attention is immediately turned, with a greater degree of intensity, to the sensations derived from the surrounding portions, and the patient is enabled, so long as this portion retains its sensibility, to enjoy the sight of objects placed obliquely and not in the axis of vision. Even in healthy eyes the non-central portions of the retina may be rendered available in particular cases. This has been proved by Brewster, Herschel, and others. In looking, for instance, at a star of the smallest magnitude, it vanishes from the sight and is lost when looked at directly, but, if you turn a little from it, it will still catch the eye and be visible, because the image of the star will now fall on a part of the retina which is generally in darkness, and which is more sensible from being unaccustomed to the glare of light. Hence in many cases of amaurosis it is not unusual to find that the patient retains the power of vision so far as regards objects placed at an oblique angle with the axis of the eye after direct vision has been all but extinguished. This is all I have to say at present with respect to amaurosis.

As there is no other case presenting peculiarities to which I might call your attention, I shall beg leave to occupy your time for the remaining part of our lecture hour with a detail of the circumstances under which I have been led to employ the acetate of lead in Asiatic cholera, and to communicate briefly the mode of its administration and the results which attended its use. You are aware that during this epidemic which commenced its fearful career in Dublin in the spring of 1832, the modes of treatment principally relied on were, bleeding in violent spasmodic cases, emetics of ipecacuanha and mustard, the application of heat externally, and internally stimulants, but, above all, calomel, not in small, but in large and frequently repeated, doses, either alone or combined with opium. I need not tell you that the mercurial treatment came to us sanctioned by high authority: it was a remedy to which the experience of Indian practitioners had given a high character, but

in our hands, I must say, it proved of very little value. Be this as it may, I must say that I had reason to be dissatisfied with this mode of treatment; I had tried it myself, and had seen it tried in every way which ingenuity or experience could suggest, but I had seen it fail in almost every instance.

About the middle of last summer the epidemic began to spread fearfully among those who had hitherto been exempt from its attacks; many persons in respectable life were seized, and my private practice afforded numerous opportunities of becoming practically acquainted with the disease. In several cases to which I was called in, the malady had not advanced to the stage of collapse, the symptoms of cholera, properly so called, had merely commenced, the intensity of the disease was still far away, and a fair chance was afforded for the operation of therapeutic agents. In most instances I tried calomel and all the ordinary remedies with profitless results; my treatment proved too often ineffectual; and some persons, whose lives I highly valued, perished in spite of all my efforts, leaving me grieved for their loss, and mortified by my own want of success. I found that I could no longer place any confidence in calomel, and determined, in my own mind, to give up a remedy which had so signally failed; it was, however, a question of deep anxiety to me what I should select instead, or to what article in the *Materia Medica* I should have recourse, where so many had proved utterly valueless.

About this period I happened to be called on to attend a case of obstinate diarrhoea with my friend Dr. Hunt. The case was an extremely harassing one, and had resisted all the ordinary remedies. I advised the use of acetate of lead and opium in full doses; this was given, and I had the satisfaction of finding that the diarrhoea soon yielded. Before this period I had received a letter from that able practitioner and excellent man, Dr. Bardsley, of Manchester, directing my attention to the use of acetate of lead in large doses in that form of diarrhoea which occurs towards the termination of long fevers, that is to say, the diarrhoea which precedes and accompanies inflammation of the glands of the small intestines. I had subsequently, at Sir P. Dun's Hospital, several opportunities of witnessing the truth of Dr. Bardsley's remarks. I saw that, in many cases during the course of fever, where the patient was low and prostrated, symptoms of intestinal congestion came on, followed by diarrhoea, which many persons thought would end in ulceration of the glands of Peyer; and I found that in such cases the acetate of lead was the only remedy that could be relied on. I observed, too, that, contrary to the prevailing opinion on the subject, it could be given in large doses with perfect safety. You are aware that Dr. Bardsley has shown that it may be given to children in very considerable doses without any bad effects, and that in adults he has pushed this remedy

to the extent of twenty or thirty grains in the day without any unfavourable consequences.

With these impressions I came to the resolution of trying the acetate of lead in the next case of cholera which offered a chance of deriving benefit from any kind of treatment. It is known that there are some cases in which the disease at once assumes so frightful a malignity, that the patient is lost from the very moment of his seizure. This hopeless and intractable malignity is not peculiar to cholera; it is seen in fever, scarlatina, croup, measles, and hydrocephalus; in fact, there are certain forms of all diseases in which the best directed efforts of medical skill not only fail in curing the disease, but even in retarding its progress. But there are cases of cholera where the patient is not struck down at once, where the disease is not developed at once in all its awful intensity, and where time, brief though the space may be, is allowed for the play of therapeutic agencies. It is in such cases the acetate of lead may be given with some prospect of success, and it is by such cases alone, and not by those which are necessarily fatal *ab initio*, that its value is to be tested.

Before we proceed further, I may observe, that the principle on which the calomel treatment was employed in cholera arose from almost constantly observing that there was a total deficiency of bile in the stools. Soon after the supervention of an attack, the alvine discharges were observed to be white and without the slightest tinge of bile; and on this very remarkable symptom practitioners dwell almost exclusively, thinking that the patient's only chance lay in restoring the secretion of the liver. Now it is obvious that the absence of bile in the stools is no more a cause of the disease than is the deficiency of urea in the kidneys or of serum in the blood. Viewing the disease in this light, it would be just as reasonable to give a diuretic to restore the secretion of the kidneys, as to give calomel to produce a flow of bile. The liver ceases to secrete, not only in consequence of the injury done to its vitality by the proximate cause of cholera, whatever that may be, but also from a mechanical cause, namely, from a diminution in its supply of blood. It may appear strange that when the same given number of vessels go to the liver and come from it at all times, that the quantity of blood circulating in it should be greater at one time than another. I have not time at present to enter fully into this subject; but it is a fact admitting of sufficient proof, that the quantity of blood circulating in any organ is very much modified by the state of its capillaries. The quantity of blood also which goes to a gland varies according to the peculiar state of that gland, being greater during its period of active secretion than when it is at rest. But in a case of cholera, where the capillary vessels of the intestinal canal from the stomach and the rectum are actively engaged in taking up the serum from the whole mass of blood, and

pouring it into the cavity of the digestive tube, there is an enormous drainage from the system, and there must be consequently a deficiency of blood somewhere. Now it would appear that a quantity of blood, sufficient for the purposes of secretion, is abstracted, not only from the biliary but also from the urinary system; and hence it appears just as reasonable to give diuretics to restore the urinary secretion, as to give calomel to excite the secretion of the liver. It would be, *à priori*, as original a mode of treatment, and be equally as successful. I have therefore no hesitation in saying that the calomel treatment has no claim to merit on the ground of theory, and, as far as I have observed of it in this country, it seems to be of no practical value in the treatment of cholera.

With regard to the quantity of acetate of lead which may be given in this disease, and the mode of administering it, a few words are necessary. I have already stated that, when I first tried it, I prescribed it in large doses, fortified by the authority of Dr. Bardsley, and by my own experience of its utility in many cases of diarrhoea. It appears that, before I recommended the acetate of lead, it had been used at the Cholera Hospital in Grangegorman-lane. Of this I was not aware until a book was subsequently published by Dr. Cranfield, which I afterwards reviewed in the *Dublin Medical and Chemical Journal*, and I feel that on that occasion I did fair and impartial justice to its merits. I certainly did not know that the acetate of lead had been given at the Grangegorman Hospital; for, in the very able report of cholera as observed at that institution, published by one of its officers, Mr. M'Coy, the treatment relied upon appears to have been the mercurial, and not a word was said of acetate of lead. It had certainly been used there by one physician, but it was given in smaller doses, insufficient to produce decided effects, and no stress had been laid on its value as a remedy in cholera by the practitioners attached to the hospital. Be this as it may, acetate of lead was not known to the medical men of Dublin and to the practising apothecaries before I recommended it. It had been frequently employed in the form of injection by them, but no one had given it in large doses by the mouth, or introduced it to the particular notice of the profession. I believe I can fairly claim the merit, such as it is, of being the first to give it in large and effectual doses. The mode in which I prescribed was this:—A scruple of the acetate of lead, combined with a grain of opium, was divided into twelve pills, and of these one was given every half hour, until the rice-water discharges from the stomach and rectum began to diminish. In all cases where medicine promised any chance of relief this remedy was attended with the very best effects. It gradually checked the serous discharges from the bowels, and stopped the vomiting. I need not say of what importance this is; as long as these exhausting discharges continue, as long

as the serum of the entire body continues to be drained off by the intestinal exhalants, what hope can we entertain? What benefit can be expected from calomel and stimulants, when every function of the digestive mucous membrane seems to be totally extinguished, except that of exhalation, and while profuse discharges, occurring every five or ten minutes, are reducing the patient to a state of alarming prostration? Knowing the inevitable fatality of all cases where these discharges went on unchecked, I was happy in having discovered a remedy which seemed to possess more power in arresting them than any yet devised, and this impression was confirmed by the results of subsequent experience. That the acetate of lead will succeed where all other astringents fail, was proved by the case of Mr. Parr of this hospital. Having got an attack of threatening diarrhoea, at a time when cholera was prevailing in Dublin, this gentleman used various kinds of astringents, and took so large a quantity of opiates, that he became quite narcotised, but without any relief to his symptoms. When I saw him he was as bad as ever, and was beginning to exhibit appearances of collapse. I advised the use of pills composed of acetate of lead and opium in the proportions already mentioned, and had the satisfaction of finding that before night the diarrhoea had ceased. The pills are to be used one every half hour while the diarrhoea remains unchecked, but as it begins to diminish the intervals between each pill may be prolonged, and in this way the patient may be gradually prepared for leaving off the remedy altogether. I have frequently given in this way as much as forty grains of acetate of lead in twenty-four hours, with great advantage to the patient, and without any bad consequences ensuing.

It is unnecessary for me, gentlemen, to say any more on this subject; if I chose to mention names, I could bring forward the names of many medical men in Dublin whose lives, I am happy to state, were saved by the use of this remedy. I may, however, observe, that this mode of treatment has now become universal here, and that it has almost completely superseded the use of calomel and opium. I will confess that this fact is a source of high gratification to me, and I point also with pleasure to the fact, that since it became extensively known (as it did during the last invasion of the epidemic), the profession has gained more credit than before, and the number of cures has been proportionally greater.

I have referred to this subject also for another reason. I feel it a duty which I owe myself, to defend myself against a series of attacks which were made on me, and to vindicate my claims, not to having been the first to administer acetate of lead, for it had been given previously by Dupuytren and at the Grangegorman Cholera Hospital, but to having been the first to prescribe it in large and sufficient doses, to render it an available and useful remedy, and to introduce it to the general notice of the profession. The credit

to which I lay claim rests solely on these grounds. I have been attacked on more than one occasion in the public papers, and gentlemen subscribing themselves *Honestas, Candidus, and Verax* (*per antiphrasin*, I suppose, for they have shown neither honesty, candour, nor truth), have attempted to rob me of the merit of what they sneeringly called the lead treatment. I am not in the habit of noticing attacks in the daily or weekly papers, but I have thought it necessary to say so much in the way of explanation, lest any of my friends or pupils should misinterpret my silence.

The following case of remarkable mobility of the sternum was observed by Dr. Stokes and myself. A medical student, nineteen years of age, and of a sanguineous temperament, who had often been attacked by violent pectoral inflammation, particularly a few years ago, but who had since become comparatively healthy and robust, applied to me for advice concerning a pain in his chest. This happened after lecture in Sir P. Dun's Hospital, in the presence of several of the students and Dr. Law, who saw with astonishment this young man open his shirt, and with his hand push the sternum deep inwards towards the spine, so as to convert the anterior part of the chest into an extensive and by no means shallow cavity, at the bottom of which was the sternum. The rapidity with which this was effected, and the unnatural appearance the chest then presented, excited a most disagreeable feeling of alarm in the minds of the spectators, for we could not avoid dreading that he was inflicting on himself some serious injury.

The portion of the chest which yielded in this singular manner to pressure, comprised the sternum from within two inches of its superior edge, and seemed below this point to be limited laterally by the lines answering to the junctions of the cartilaginous with the osseous portions of the ribs, so that the whole space capable of being pressed inwards was nearly triangular in shape, and was very extensive. The sternum was so tender to the touch that in applying the pressure he was obliged to press at some distance at each side of this bone. When the pressure was carried to the farthest point, the sternum was pushed in, as nearly as we could guess, about two inches, and the action of the heart, as well as that of the subjacent lung, appeared to be notably diminished, and, in consequence of this, the pulse was weakened. This young man was subject not only to constant pain in the sternum, but likewise to frequently recurring violent palpitations of the heart. His chest was sufficiently ample and well-formed, but he had lately become round shouldered, in consequence of his seeking relief from pain by stooping forward. No other portion of his osseous system exhibited the least trace of softening. The only affection which I can call to mind the least resembling this, is the softening which sometimes affects the female pelvis, giving rise to great distortion, and

which softening is accompanied, during the months or even years of its formation, by severe pelvic pains.

LECTURES

ON

MIDWIFERY & THE DISEASES
OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCUCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXIV.

Dystocia from too rapid Labour.

GENTLEMEN,—At my last lecture I concluded the consideration of those labours which come under the first class of *Dystocia*, viz., where parturition is rendered faulty or unfavourable from difficulty or impossibility of completing it by the natural powers. We now, then, come to the second class, where parturition is faulty, dangerous, or unfavourable, but where its course is not interrupted. This may arise, first, from labour following too rapid a progress; secondly, from prolapsus, &c. of the umbilical cord; thirdly, from other conditions and circumstances which render labour dangerous, as convulsions, dyspnoea, syncope, placenta prævia, &c.: some of these have been already considered.

With regard to labour following too rapid a course, this at first sight might perhaps appear to be rather desirable than otherwise; but from what I have already said on former occasions, you will have had sufficient evidence that the *partus precipitatus* can seldom take place without more or less mischief.

The cause of precipitate labour depends either on the resistance which is opposed to a natural state of the expelling powers being insufficient, or on the expelling powers themselves acting with unusual force, where the degree of resistance is not less than natural.

In the first case, the fetus, although of itself relatively well made, may be too small, or may be so from malconformation; the head, which in this respect is the most important part, may be either too small or too yielding from insufficient development of the cranial bones; or the parts of the mother destined for the passage of the child may be too spacious or yielding, not producing that degree of resistance which they usually do.

In the second case it arises from the degree of expulsive force which is exerted; the pains are irregular, and from the very beginning of labour are unusually strong; they return after very short intervals; are very painful, inducing irresistible straining; and, towards the end of labour, rise to an extreme degree of violence; or sometimes the uterus remains in one continued state of violent contraction, so that the labour is completed during one long

and powerful pain. This will be occasionally observed in some families to be an hereditary disposition, where not only the patient herself, but her mother and grandmother before her, have been all remarkable for their short but violent labours, although in other respects perfectly healthy. This state of uterine action may even be attended with convulsions, especially where the contractions are very painful, and the patient of a nervous irritable habit. But why these peculiarly violent labours should run, as it were, in certain families, I am quite unable to say: I have already shown you that very slow and lingering labours from deficient expelling force may be also hereditary. In those persons who, before marriage, have suffered considerably from dysmenorrhœa, where the pain at the menstrual periods is so severe as to require warm baths, opium, &c., the labours are usually observed to be very rapid from the great activity of the uterus; whereas those who feel nothing during the menstrual period, and hence show but little uterine activity, frequently bear slowly and with difficulty.

All acute fevers induce precipitate labours, especially eruptive fevers; also inflammation of the lungs, &c. Where labour has come on during an attack of scarlatina, the efforts of the uterus are really wonderful. Most cases of precipitate labour, however, consist of a complication, of a wide pelvis, small child, and powerful pain: the results of this may be rupture of the os uteri, vagina, or perinæum; or the uterus or the vagina may be prolapsed. Where the pelvis is too wide the inferior segment of the uterus sinks deep into the pelvic cavity, and sometimes even protrudes. Cases have been recorded where the whole uterus has been prolapsed, so that the child has passed out at the os externum before it was expelled from the uterus. Professor Naegelé informed me of a curious case of this sort which once occurred to him. During a former labour the pains had been so violent and the uterus detrudd to such a degree, that actually the lower half of it appeared between the labia. To prevent a similar accident occurring at her next labour, he had her put on a broad T bandage, coming over the os externum so as to prevent the uterus being prolapsed beyond the labia. He cut a hole in it corresponding to the vagina, and the child was born through this with perfect safety to the mother.

Among other injurious effects of too rapid and violent labours, Wigand considers that puerperal mania is occasionally produced by them. Whether this be the case or not I cannot exactly say, but this I know, that by the sudden emptying of the uterine contents the pressure is at once taken off the abdominal viscera, and syncope, convulsions, &c., may instantly be the result. If we separate the placenta too soon after such a labour, before the uterus is properly contracted, inversion and the most terrible hæmorrhage may follow.

It sometimes happens that the too sudden removal of the pressure from the abdominal viscera may have such a violent effect upon the nervous system as to produce even instantaneous death.

The child also may suffer injury from labours which are too rapid, especially where the uterus remains in one long continued contraction, for under these circumstances its circulation may be impeded by the constant pressure which is exerted upon it; or the mother may be suddenly surprised by the pains before she can put herself in a proper posture, and the child be precipitated upon the floor, the cord torn off, the uterus inverted, and the placenta forcibly separated: this last, however, seldom happens. Such falls are not so dangerous for the child as one would suppose;—medical jurisprudence has proved this. A child may thus be thrown even upon a stone floor and yet receive no injury. I have met with two cases where it was thrown upon a boarded floor with great violence, and in both cases the cord broken, and yet without injury. One reason for this is, that it never comes straight downwards, but is thrown out obliquely. The cranial bones also are soft and yielding; and I have already, on a former occasion, mentioned to you what a degree of violence the fœtal brain can sustain without destroying life. I know of a case where a child was unexpectedly precipitated down a privy three stories high without injury! Where the head is slowly entering the vagina in a first labour, patients are apt to mistake the involuntary disposition to bear down, which they now feel, for a call to evacuate the bowels, and, if permitted, would actually sit upon the night stool until the child was born.

There is a fact connected with these precipitate births which I do not exactly understand. The cord in such cases is almost uniformly ruptured about three or four inches distant from the navel, nor does this seem to have been effected with any considerable violence either to the mother or child. Inversion of the uterus, as I have before told you, rarely follows; the umbilicus of the child presents no marks of injury; and yet, with all this, you may twist an end of the same cord round each hand and pull: you will frequently find that it defies your utmost efforts to break it. M. Klein, the celebrated surgeon of Stuttgart, was at the pains to collect all the cases of this sort to a very considerable number, and publish them; and it is a curious fact, that not in a single instance did the child sustain any injury. In animals, the cord I believe mostly ruptures at some little distance from the abdomen of the fœtus. The question is, whether the cord be really weaker at this point than elsewhere.

Where twins are present, the danger from too rapid parturition is much increased. If the cause result from too small a degree of resistance, this, if possible, must be supplied by treatment. The patient must avoid straining

with her pains, she must preserve a state of perfect quiet in the horizontal posture, with the pelvis more elevated than the shoulders, and keep upon her side, with nothing to pull or push against. Supporting the presenting part is not of much importance; but, if the os uteri come down very low, it requires support, for in such cases we not uncommonly feel it protruding at the os externum. Giving the patient purgatives, &c., to weaken the pains is bad practice: in the first place they weaken the patient, and in the second place they are more apt to excite the pains than not; the same, to a certain extent, holds good with bleeding. In labours of this sort the membranes are apt to rupture too soon; and when the os uteri is not sufficiently dilated this may have the most mischievous effects. The best means of repressing the inordinate action of the uterus is by binding a broad band tight round the abdomen where we fear a disposition of this sort, and keeping it on during the whole labour. So much, gentlemen, for labour following too rapid a course. You must not suppose that it *always* produces these results; nevertheless, it is necessary that you should be prepared to meet them. I recollect once having a patient where the first pain woke her during the night and ruptured the membranes, the second expelled the child, and yet no injurious consequences followed.

I now come to describe to you *prolapsus of the umbilical cord*, or where a portion of the cord falls down before the part of the child which presents. I know of nothing more disagreeable than a case of this sort, where the labour itself goes on perfectly favourably, and yet if assistance be not given the child comes dead, or where we turn, and then frequently the child and sometimes even the mother perish. This faulty condition does not appear to have been noticed by the older authors. In Cælius we find not the least mention of it, and even in the work of the celebrated Mauriceau I can only find two cases of prolapsus of the umbilical cord.

If the membranes be not yet ruptured, we feel something by the side of the head like a finger, and on holding our own finger quite still for a moment, the pulsation will be distinctly felt. Not infrequently you will feel an artery beating in or near the os uteri itself; and where the membranes are not ruptured the mere feel may mislead; but the facts of its being synchronous or not with the mother's pulse will always enable you to decide. If the membranes rupture, several folds of cord come down into the vagina, or even protrude into the os externum.

A variety of causes has been assigned by authors as inducing prolapsus of the cord; thus, for instance, Carus considers that an oblique position of the head is a cause; it may be so, but I must own that as yet I have never seen a straight position of the head. A badly-formed pelvis has been said to produce it, but this cannot hold good, for we constantly

meet with labours where the pelvis is excessively deformed, or where there is no prolapsus of the cord; while, on the other hand, we constantly observe it to be prolapsed in the best formed pelvises. Other authors say that it is liable to occur where the feet present. This is very possible, but why should not the cord prolapse in every case of pregnancy? In animals this would be, perhaps, easy enough to explain, but in man it is not so easy; it seems to arise from that state of elastic pulsating turgor which the cord possesses when distended with blood, and which prevents it from easily falling down between the uterus and head. This is probably the reason why the cord is so frequently prolapsed where the child is dead; but it is chiefly owing to the lower portion of the uterus, which usually surrounds the head tightly on all sides, being prevented doing this by distension from a large quantity of liquor amnii, and under these circumstances the cord is very liable to prolapse. If the labour does not follow tolerably quickly, and the head remains some time in the pelvis, the child is almost certainly born dead. Puzos and La Motte asserted that if the labour was left to itself the child perished. This is going rather too far, because I have frequently known the head to pass first through the pelvis, without any assistance, and yet the child came alive. In such cases the cord will lie safest when close to the right or left sacro-iliac synchondrosis, because here there is most room for it, and therefore least danger of its being pressed.

Turning has been always recommended as a matter of course, but this advice should be taken cautiously, because it is not always necessary. Dr. Ramsbotham and Dr. Hamilton say that prolapsus of the cord is *never* an indication to turn. This is going as much too far the other way, although to a certain degree they are right.

In Germany and in France people have endeavoured to replace the cord, but this never succeeds; and it is astonishing that authors of modern times should have been either so ignorant of, or so inattentive to, what has been said upon this subject more than a century ago. La Motte was the first to show that when the cord is prolapsed it is useless to attempt returning it. "It is in vain," says Levret, "to think of returning the umbilical cord when once it has come down, for we can never completely return it or keep it there. It is better to turn the child than to leave the delivery to nature, or attempt any of the useless precautions which various authors have recommended." "The operator," says Fielding Ould, "must introduce his hand into the matrix along the child's breast to bring it forth by the feet, and especially if one or both hands, or if the funis come with the child's head, for there is hardly any possibility of returning any of them to their proper place; the funis will fall down as often as you thrust it up, and there is no room to bend

the arm for its reduction." After the well-known authorities which have now been quoted, I cannot imagine how an author like Mr. Burns can have recommended us to replace the cord when prolapsed. A midwife at Amsterdam has recommended a sponge dipped in oil to be passed up, thus pushing the cord before it; but I know of no facts respecting its efficacy. Our conduct should be guided by the following circumstances:— If the patient in her former labours has had long and tedious times, and the head be too high, or the os uteri not sufficiently dilated to admit of the forceps being applied, if the cord still pulsate, nothing remains but turning the child; if, on the other hand, she has always had quick times and strong pains, and the cord is in a favourable part of the pelvis, we may leave it to nature, and when the head comes deep enough the forceps can be safely and advantageously applied. If, however, the cord be flaccid and without pulsation, the child is dead, and hence it will be unnecessary to turn.

SELECTIONS FROM THE GULSTONIAN LECTURES.

Delivered at the College of Physicians,

BY A. P. W. PHILIP, M.D., F.R.S.

(Continued from p. 569.)

IF we review the functions of the living animal as they appear, independently of all experimental investigations (says Dr. P.), we shall find that two great classes present themselves—those of the sensitive system, by which we are connected with the world that surrounds us, and those of the vital system, by which our bodies are maintained. It is to the latter that the attention of the physician is chiefly directed, and no farther to the former than they are found to influence the functions of the vital system.

It is evident, without much consideration, that the vital functions include respiration, circulation, those processes by which our food is assimilated—that is, converted into the various organs of our bodies,—and those by which such parts of them as have become unfit for the purposes of life are separated and expelled; for all are in a constant state of change.

Now in all these functions some part of the means employed are evidently the same which operate in the inanimate world. Respiration is performed; that is, the air is drawn into and expelled from the lungs by means which act on the same principle as the bellows. The blood in the circulation moves on the same principle as the water in a set of water pipes; it obeys a propelling force, and is subjected to the same laws of gravitation. Similar observations apply to the various processes of assimilation and excretion. We can trace in these processes the same chemical laws which

obtain in the laboratory of the chemist; but there is at the same time, in all the foregoing functions, something more in operation, analogous to which we find nothing in inanimate nature.

The force, indeed, by which the air is drawn in and expelled in respiration, operates on the same principle as in the bellows, but the power by which the machinery is worked is the contractile power of the muscular fibre. The motion of the blood depends on the same principles as that of the water in its pipes; but it is the contraction of this fibre also which supplies the power which moves it. In the maintenance of the organs of our bodies, and the separation of those parts of them which have become useless, and therefore noxious, we trace the same chemical laws which operate in other parts of nature, but we can also perceive that they are constantly modified by those powers which are peculiar to the living animal; for it is not only impossible by any chemical arrangement to produce the same results in inanimate nature, but even to trace all the steps by which they are effected. It is in consequence, for example, of the same combination of oxygen and carbon that the caloric which supports animal temperature is evolved, by which its evolution takes place in so many of the processes of inanimate nature. It is literally a slow combustion which maintains the temperature of the living animal; but we can neither imitate the process by which caloric is evolved from living blood, nor even trace all its steps. No position can be more erroneous than that the chemical processes of the living animal depend alone on the same laws with the chemical processes of inanimate nature. The property of life bestows on matter powers as peculiarly its own as the property of gravitation.

It is not, however, impossible, nor, as far as relates to the mechanical parts of respiration and circulation, difficult to ascertain what parts are employed in the several functions of the living animal. The mechanical part of respiration, we know, is performed by means of the bones, muscles, and nerves of the chest, although we can neither tell what enables the muscle to contract, nor the nerve to convey the stimulant which excites it. The mechanical part of the circulation is effected by the muscular power of the heart and vessels (for it will be admitted, I think, from the facts stated in a paper published in the Philosophical Transactions for 1831, and re-published in my treatise on Sleep and Death, that the powers of the heart and vessels are of the same nature), although we cannot tell how the stimulating contents of the blood operate in exciting these organs.

In the foregoing functions, it is only necessary to be acquainted with the structure of the parts and observe their operation, at once to perceive where the power resides; but with respect to the parts employed in the functions of assimilation and excretion, the question is more difficult. By what parts of the living

animal are these processes effected? This is the information which the physician most wants, because the functions to which it relates are those, in most instances, both most uniformly and to the greatest degree deranged in disease. He wants to know, when these essential functions fail, where he is to look for the cause of failure.

When the mechanical part of respiration or circulation is deranged, we know where to look for the cause of derangement. When the chemical parts of these, or any of the other assimilating functions, are deranged, where is the fault?

The common reply is, in the assimilating and excreting vessels. What is meant by this? Do we mean that the vessels themselves are endowed with chemical power? that organs which, according to the most accurate experiments, possess only the muscular and elastic powers, become capable, by some mysterious endowment, of separating and re-combining the chemical elements of the blood? a position not only at variance with every thing we know of the laws both of the animate and inanimate world, but in opposition to simple matter of fact; for when the powers of assimilation are wholly and finally destroyed, all the vessels of the part, we find, may still retain all their known powers, the blood be still carried on by them in precisely the same way, as may be ascertained by the aid of the microscope, as when the assimilating powers were unimpaired. How, then, shall we ascertain where the fault lies when the assimilating functions are deranged? Simply by ascertaining on what organs they depend.

As all the powers peculiar to the living animal, with the exception of the vital powers of the blood itself, which we know, unassisted, to be unequal to the maintenance of the assimilating functions, because these functions require peculiar arrangements in the solid parts of our frame; I say, as all the powers peculiar to the living animal, with the exception of those of the blood itself, belong to the nervous and muscular systems, it follows that if the muscular cannot immediately co-operate with the blood in the maintenance of the assimilating functions, there is no other source to which we can look for this co-operation but the nervous system; and in conformity with the conclusion to which we seem thus unavoidably led, while, on the one hand, both the known properties of the muscular system, and direct experiment, prove that it is incapable of any immediate co-operation in the maintenance of these functions; we shall find that all we know of the properties of the nervous system, as well as direct experiment, evince that it is capable of this co-operation.

But before the knowledge we thus arrive at can be made fully available to the purposes of the practical physician, we must know whether the powers in question belong to the whole or particular parts of the nervous system; and, if the latter, to what parts.

This question I had occasion to consider at length in one of the papers re-published in my *Inquiry into the Nature of Sleep and Death*, from the *Philosophical Transactions* for 1833, *On the relation of the nervous and muscular systems, and the nature of the influence on which it depends*, from which, as far as I am capable of judging, it appears that the brain and spinal marrow alone are the active parts of the nervous system, the office of the nerves being merely that of conveying, and, in the ganglionic system, combining, the influence of the different parts of these organs.

ONE of the most striking features of the nervous system is that the nerves are divided into two distinct classes,—the one proceeding directly from the brain and spinal marrow to the parts they influence; the other entering a chain of ganglions, from which nerves are sent to the parts influenced by this class; some of both classes proceeding from the brain and some from all parts of the spinal marrow. By the one class the organs of the sensitive, by the other those of the vital, system are supplied.

We cannot suppose that this arrangement is fortuitous; it must answer some important end. I made many experiments, with a view to ascertain its objects.

As the onset of nerves go directly to the organs influenced, and the other to a chain of ganglions which receive nerves from various parts of the brain and spinal marrow, and from which nerves are sent to the parts influenced by this class, it seemed probable that the former parts are under the influence of the particular parts of these organs alone from which they receive their nerves, while the latter may receive the influence of many parts of them.

This question could only be determined by experiment; and it appears from many experiments published in the *Philosophical Transactions* for 1815, and afterwards re-published in my *Inquiry into the Laws of the Vital Functions*, not only that such is the case, but that, while the sensitive organs receive only the influence of those parts of the brain and spinal marrow from which their nerves proceed, it is from every part of these organs, from the uppermost surfaces of the brain and cerebellum to the lowest portion of the spinal marrow, that the parts supplied by ganglionic nerves receive their nervous influence.

The heart, the vessels, the stomach, the lungs, were all found to be under the influence of every part of the brain and spinal marrow. Even the action of the vessels to their minutest ramifications, it was ascertained with the aid of the microscope, could be increased, impaired, or even destroyed, by agents, the operation of which was confined to any portion of a certain extent of either of these organs, for the most powerful agent fails to influence either the vessels or any other vital organs, if confined to a minute portion either of the brain or spinal marrow.

The foregoing effect on the vessels, it was

also ascertained, is direct, and not through the medium of the heart; for they were the same when, in the newly dead animal, after throwing a ligature round the vessels attached to the heart, this organ has been removed. Nor is the influence either of the brain or spinal marrow conveyed to the vital organs through the other, as that of the brain in many instances is to the sensitive organs through the spinal marrow; but is equally observed from agents affecting either, when the other has been removed.

For what purpose is the influence of every part of the brain and spinal marrow thus bestowed on the organs of the vital system? This question also is answered by the experiments just referred to.

There was an essential difference in these experiments in the manner in which the different vital organs were influenced by the brain and spinal marrow. While causes confined to either of them were capable of increasing, impairing, and even of instantly and almost wholly destroying the power of the heart or capillary vessels, the total removal of either or both produced no sensible effect on them; but with respect to the stomach and lungs, it appears from experiments, to which I have already had occasion to refer in considering the opinions of Dr. Alison, that whatever prevents the influence even of any, except very small, portions either of the brain or spinal marrow from reaching them, deranges, and of any considerable portion, wholly destroys their functions. It was evident, therefore, that although the heart and vessels could be influenced, and that to any degree, by causes confined to the brain or spinal marrow, their power is derived from another source; while to that of the stomach and lungs, not only the influence of these organs, but their entire influence, is essential. The removal of any considerable part of it immediately deranged the secreted fluids of both, and of any large portion wholly altered their properties; and it appears from the facts stated in a paper published in the Philosophical Transactions for 1827, and afterwards republished in my Inquiry into the Nature of Sleep and Death, that similar observations apply to all their other assimilating functions; so erroneous was the opinion of M. le Gallois, that the power of all the vital organs depends on the same principle, and so erroneous that of Dr. Alison and Dr. Henry, that the brain and spinal marrow are only organs of the sensitive functions. In these experiments the sensitive functions remain uninfluenced. When the secretion of gastric juice was wholly destroyed by dividing and separating the divided ends of the eighth pair of nerves, the appetite, as long as there was any disengaged gastric juice in the stomach, was as good, and to the last the desire to breathe as great, after as before the operation. There was no symptom whatever of the impaired sensibility supposed by Dr. Alison. The assimilating functions alone

were impaired or destroyed, precisely according to the degree in which their organs were deprived of the nervous influence; proving that the brain and spinal marrow include the organs on which these functions depend, as well as those of the sensitive system.

We thus see why it is necessary that the assimilating organs should receive the influence of every part of the brain and spinal marrow; and as the nervous influence would be useless if the blood on which it operates in the assimilating functions were not supplied, and its functions deranged if its supply were not regulated by the same powers which regulate the supply of that influence, we readily perceive why it was necessary that the organs of circulation, though deriving their power from another source, should be under the immediate influence of those organs which supply the agent on which the assimilating powers depend.

The assimilating functions, then, require the influence of the whole brain and spinal marrow, — a fact we shall find fully illustrated in actual practice; and it is bestowed on them through the ganglionic system of nerves, which, receiving supplies from all parts of them, and sending nerves to all the assimilating organs, is evidently well adapted to this office. It is at once evident from this arrangement, that although in the sensitive system, the organs of which receive their nerves directly from the brain and spinal marrow, it necessarily follows that certain parts of the general frame are found to correspond to certain parts of these organs, this cannot, as M. le Gallois supposes, obtain in the vital system, the organs of which receive their nervous influence from a chain of ganglions in which the influence of all parts of the brain and spinal marrow are combined, and by nerves which convey this combined influence alone.

It requires no nice powers of discrimination to perceive the line of distinction between the functions peculiar to the living animal and the operations of inanimate nature. We find nothing in the latter analogous to the functions of the brain and spinal marrow, or even to the contractile power of the muscular fibre, and the powers of living blood.

The powers of life, properly so called, can reside only in the organs and fluids to which they belong in the living animal; and in their functions none of the powers of inanimate nature can be substituted for them.

So evident is the truth of these positions, that it is perhaps the most striking instance of the force of preconceived opinions which could be adduced, that, self-evident as they are, they have been called in question; and a power capable of residing in other textures than those to which it belongs in the living animal, and for which in all its functions we can substitute a power of inanimate nature, is still, by those who cannot disentangle themselves from their prepossessions, regarded as peculiar to the living animal. They admit,

for the experiments have been too often repeated, and by men whose accuracy cannot be questioned, to allow of hesitation respecting their results, that the influence which proceeds from the brain and spinal marrow, and is sent along the nerves, may exist in other textures than those of the nervous system; and that Voltaic electricity is capable of all its functions: and yet, with a degree of inconsistency which almost amounts to a contradiction in terms, they maintain that it is an influence peculiar to that system. They admit that it can exist elsewhere, and that a power which operates in inanimate nature can perform its functions, and yet maintain that it is peculiar to the nervous system of the living animal. I must leave such to the conviction which awaits them; for surely to the unbiassed understanding these facts warrant the conclusion, that the nervous influence, like the mechanical powers to which I have had occasion to refer, is among those powers which the living animal possesses in common with the external world; and we shall find that this inference is strikingly confirmed by the practice which is founded upon it.

If any doubt on the subject could have remained, the late experiments of Dr. Faraday, by which, I believe, it will be admitted that he has established his doctrine of electrochemical equivalents, according to which all chemical changes are the effects of electric action, would have removed them. He has been so good as to assist me in my attempts to cause the nervous influence to affect the galvanometer, in which I have not yet succeeded. But this need not surprise us, as the electricity of electric animals is found incapable of affecting the common electrometer; yet who doubts that it is electricity, modified by the properties peculiar to living animals, on the same principle that we see it modified to a far greater degree by those peculiar to the magnet.

If the foregoing conclusions from experiments, not merely performed privately by an individual, but publicly repeated with the same results, both in London and Paris, be admitted—I say, if the foregoing conclusions be admitted, and I do not see the possibility of questioning them, the brain and spinal marrow include organs capable of collecting, and, through the nerves, applying Voltaic electricity, which, modified in its effects by the properties of life, is the immediate agent of the assimilating functions; and that the nervous systems of animals is capable of collecting and applying, even according to the dictates of the will, the electric power, is evident from the phenomena of electric animals.

A principal obstacle with which the truth has here had to contend, has arisen from the difficulty of drawing the line of distinction between the sensorial and nervous functions, properly so called. It is apparent, on the slightest consideration, that the nervous system includes more than one principle of

action. It is impossible to class together the excitement of a muscle, or the formation of a secreted fluid, with sensation, volition, and other mental functions. The analogy which the one set of functions bears to the operations of inanimate nature is too apparent to escape the most careless observer; in the other it is at once evident that all such analogy is lost.

The difficulty of determining the line of distinction, in some operations of the animal economy, between these classes of functions, both of which belong to the brain and spinal marrow, has been a principal cause in the minds of those who have not been in the habit of considering with much accuracy the functions of the living animal—of obscuring the very simple inferences just stated. Can we, it has been said, suppose that electricity feels and thinks? Surely nothing more than the meaning of the terms is necessary to the reply; and no man who in the least degree understood what had been done on the subject, could have asked the question.

It is equally the result of observation and experiment, that the stimulants on which the excitement of our organs depends belong to inanimate nature; and on what principle could we expect any other result? Are not these organs themselves composed of the same materials as the world which surrounds us? and on what principle could they be immediately impressed, but by stimulants of their own nature? With the relation of our organs to external agents, the principle of life no farther interferes than its own peculiar properties are concerned. The light impresses the eye, the air the ear, on the same principle that they impress other bodies. The peculiarity of the effects depends on certain properties of the eye and ear; and do the facts which have been laid before the College admit of any other inference, than that it is also an agent which operates in the external world that excites the muscular fibre? The peculiarity of the effect depends on the property of that fibre. Is it not excited by a thousand other such agents? Shall we maintain that the scalpel of the surgeon is capable of precisely the same effect as a vital power, properly so called?

It is true that we see in the animal economy a set of functions not immediately dependent on the agents of inanimate nature, their organs being removed from the immediate effect of those agents. Mediatly, however, they are equally dependent on them. The sensorial functions are not more distinguished from the nervous and muscular by the difference of their nature, than by that of the agents which immediately excite them, for they can be excited only through the medium of other vital organs.

That the organs of the sensorial system, and those of the nervous system, properly so called, through which alone the former are excited, although both residing in the brain and spinal marrow, are distinct sets of organs,

is proved from their different locality, from the one being often in the greatest degree deranged in disease, without the other being at all affected, and from all the nervous functions remaining after the sensorial have been finally withdrawn.

Thus in the latter functions the agent which immediately excites, and the organ excited, are equally vital parts; and we know from the phenomena, that it is by their vital properties that they influence each other. Hence in them the loss of all analogy with the operations of inanimate nature. It is on the immediate intercourse between animate and inanimate agents that this analogy depends. Where the intercourse is between vital parts, and by their vital properties alone, it wholly and necessarily disappears.

Having been led, in a very early part of my investigations, to perceive the confusion which had crept into several departments of physiology, from the indistinctness of the line of distinction between the sensorial and nervous functions, I made many experiments with a view to ascertain this line. That I might be enabled to ascertain it with the greater precision, this was attempted by two sets of experiments, conducted on different principles; the object of the one being to ascertain what functions remain after the sensorial power is withdrawn; of the other, what functions cease on withdrawing the nervous power.

Review.

Observations on the Heart, and on the Peculiarities of the Fœtus. By JAMES JEFFRAY, M.D., Professor of Anatomy in the University of Glasgow, &c. Glasgow: Smith and Son.

THE author of the present work has been for many years a successful professor of anatomy, a practitioner in surgery for about half a century, and he is a septuagenarian; he must, therefore, have had extensive professional experience in the usual acceptation of that term; hence, from the pen of such an individual we look for matter possessing high intrinsic value—not conclusions supported by conjecture, nor metaphysical subtleties—but great practical facts; not the observations of every day life, but important ones collated from vast and long experience.

The title of the book acquaints the reader with its object. It is dedicated to Dr. Mac Donnell of Belfast, and is published at the request of some of the author's quondam pupils, who had been so gratified with the lectures when delivered. The style is strictly lectorial: it is plain, familiar, and communicative, such as all lectures should be. The general account of the heart—its descriptive anatomy—is supposed to have been given, when the first scene exposes to our view the

right auricle, the openings into it, the tubercle of Lower, the valve of Eustachius, the musculi pectinati, and foramina Thebesii. The structure and functions of these parts, and their physiology are fully discussed.

The tubercle, he says, exists in the human subject, but projects very slightly into the cavity of the auricle—it is little more than a thickening of the wall of the auricle. He regards it as being formed by a plane of muscular fibres, being attached at one extremity to the anterior border of the foramen venosum, and by the other to the posterior margin; so that, when the fibres contract, the attachments being fixed, the point of union of the two cavæ, corresponding to Lower's tubercle, is carried inwards, and thus the blood from those veins is directed into the right ventricle. This is exceedingly pretty, but we cannot give full credence to the hypothesis without further demonstration.

We have given the above abstract on the tubercle of Lower. The idea, though not altogether original, yet is clearly developed, and carries with it, *primâ facie*, the semblance of truth. It would not suit our purpose, nor even be doing justice to the author, to deal with the whole work in a similar manner. As the subjects treated upon are important to physiology, and as they invite to elaborate discussion, we must postpone them, owing to the limits of our space. We shall, however, give one extract, which will display the style in which the book is written, and the author's powers of reasoning, and the method of treating the different topics, and then close our notice.

Abolition of the Fœtal Peculiarities.—The scope and the design of all and every one of the peculiarities, as they are usually called, of the circulation, in the fœtus, is, we have seen, in the first place, to compensate for the want of respiration; and, secondly, to distribute the purified blood more abundantly to some organs than to others, that they may be ready to act as soon as the child is born.

“After birth, or at times during birth, the child makes a deep and gasping inspiration, and immediately, in general, or soon thereafter, all the peculiarities are done away. There is in this something so magic like, so sudden, so simple, so complete, that after we have examined and comprehended what has been done, and how it has been done, we stand astonished, and anxiously contemplate the effect. All that we see done is, that the child has opened its mouth, raised its ribs, advanced its sternum, and depressed its diaphragm; in other words has enlarged the cavity of its thorax. The consequence of this is, that there would be a void space, a vacuum, left between the surface of the lungs and the parietes of the thorax; were it not that the air rushes down through the aspera arteria, and blows up the lungs; so that as the parietes recede, the lungs expand, and are, during the whole time of their expansion, as

much in contact with the walls of the thorax, as they were before the expansion began.

“There is, however, another effect which immediately follows, or rather is synchronous with, this enlargement of the cavity of the thorax; and, though less attended to, is perhaps of as great, if not greater, importance. It is this, the same force, that draws or presses the air down through the trachea, presses or draws into the lungs not only the blood that used to come into them by the pulmonic branches of the pulmonary artery, but all the blood that used to go past the lungs by the ductus arteriosus.

“This is a great change in the circulation; and because not seen so evidently as the entry of the air into the lungs, is more puzzling to the young student; till he recollects that all the branches of the pulmonary artery, which, before the amplification of the thorax, were crumpled up and compressed, so that they could not receive more blood than what the pulmonic branches of the pulmonary artery brought, are now stretched out and elongated, and freed from compression; and not only fill up all the interstices between the ramuli and vesicles of the bronchial tubes, but cover and hide them with a coating of capillary vascularity,—and that as these blood-vessels were as much compressed before inspiration as the air-vessels and cells, he will see that they are now as able to receive an additional quantity of blood, as the dilated bronchial tubes are to receive an additional quantity of air. The matter may be made more intelligible still by the following simple experiment.

“Take two vessels, as nearly alike in shape and capacity as may be, and pour into the one of them a certain quantity of pure water, and into the other an equal quantity coloured; and, having weighed them, take a common injecting syringe, and fit accurately to the nozzle of it a tube, from which two other tubes, as nearly equal to each other in length and diameter as possible, go off; then insert the mouth of the one for some way into the water in one of the vessels, and the other into that in the other; and drawing up the piston, and allowing time for the fluids to rise, remove the syringe with its tubes, and weigh the vessels again. It will be found, if things have been properly adjusted, that the quantity of water which has risen up through the one tube is exactly equal to that which has risen up through the other.

“These things being considered, the student will see that the vacuum which has been formed by drawing up the piston, is precisely like the vacuum that has been formed by the enlargement of the cavity of the thorax; and he will understand how it happens that all the blood, which used to pass through the ductus arteriosus to the aorta descendens, is now irresistibly drawn into the lungs, through the two pulmonic branches of the pulmonary artery, and that these must dilate, to receive this extra tide; while, on the other hand, the ductus arteriosus,

obedient to the law that obtains in all such cases, must shrink and become impervious, and, at last, be converted into a ligament.

“He will also see, and that clearly, that, as now all the blood, thrown out of the right ventricle of the heart into the pulmonary artery, circulates through the lungs, and returns to the left side of the heart by the pulmonary veins, which pour it into the left auricle in full streams, the valve of the foramen ovale must be pressed as firmly against the septum on the left side, as by the blood from the venæ cavæ and coronary veins on the other—and that no blood can now pass through the foramen ovale from the right auricle into the left or from the left into the right. If the valve adhere to the septum, all around the brim of the foramen—good and well; but if it do not, as sometimes is the case, no inconvenience can ensue; for, the forces on either side being equal and opposite, the valve must stand like a door or flood-gate, shut, accurately shut, but not bolted.

“It will, I fear, be more difficult to bring into view the causes that arrest the circulation in the umbilical cord.

“Some have supposed that the vessels of the cord must shrink, when exposed to the cold air. But though this theory may have some appearance of reality in cold climates, it will not explain the fact in the torrid zone.

“Others have had recourse to atmospheric pressure, &c., and with equal success. There seems to be very little reason to hope for an explanation of the fact, from anything external to the child. We must, then, look within. And here it should be remembered, that the heart of the child that has respired is double; so long as the ductus arteriosus was pervious, and the foramen ovale open, the heart was single. But now that they are both shut, and the one side of the heart has no communication with the other, all the blood passes through the lungs, and is there rendered arterial, and is returned to the left side of the heart a more powerful stimulus than it was before. And, in the next place, it should be remembered, that before the child respired, the blood in the ductus arteriosus was sent into the aorta descendens, by the force of the feeble right ventricle; but after the child has respired, the whole blood is thrown into the aorta ascendens by the more powerful contraction of the left ventricle. The consequence of this immediately is, that the push made against all the branches of the aorta, and against the diminutive branches of the chylopoietic viscera among the rest, is greatly increased; and they must, and do dilate, and receive a greater quantity of blood.

“But if a greater quantity of blood be sent, and with an increased momentum, into the dilated chylopoietic arteries, a greater quantity must be returned to the *vena porta* by the abdominal or chylopoietic veins. Let it now be recollected, that in the fœtus the largest branch of the umbilical vein entered into

the vena portarum, and that the blood which it brought circulated throughout the liver in the hepatic branches of the vena portarum, because the quantity of blood in the vena portarum was small, and its momentum less than that of the blood in the umbilical vein. But the child having respired, things are greatly altered. The quantity of blood that is brought to the vena portarum, by the ventral veins, is much increased, and its momentum is greatly augmented; so that when it arrives at the communicating branch it drives back the blood in that branch, and thereby arrests the progress of the blood in the umbilical vein, all the way back to the extremities of the arteries in the placenta. But if now no blood can enter the child by the umbilical vein, and if as little can go out of it by the umbilical arteries, these arteries will, like the ductus arteriosus, shrink and become impervious ligaments, all the way back to the last branches they gave off, at the sides of the bladder, while the vein will be converted into a ligament, and ever after serve only to strengthen the lower border of the suspensory ligament of the liver.

"But if the foramen ovale be closed and the ductus arteriosus and umbilical cord be converted into ligaments, the heart is no longer the single heart of the fœtus, but the double heart of the respiring child,—all the peculiarities are done away, and the permanent order of things is established."

EXTRA-UTERINE PREGNANCY.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I beg to transmit for insertion in your valuable Journal, should you consider it worthy, the following case, which possesses rather singular phenomena, and which may not perhaps be uninteresting to some of your readers.

Mrs. Southwell, aged 37, of a slender make, and rather dark complexion, the mother of one child. According to her own report, she enjoyed good health till the beginning of July, 1831, at which time she had an abortion at the fourth month; there was considerable flooding; the fœtus was expelled while she was standing upon the floor. She went immediately to bed, and a midwife, who was called in, applied the usual bandage. The placenta was not expelled along with the fœtus, nor was it ever afterwards observed to come away. A dark coloured and odorous discharge continued for some time from the vagina. After several weeks menstruation commenced, and continued regularly till January, 1832, at which time she thought she became pregnant, and continued to feel as during her former pregnancy. Between the fourth and fifth months she felt the motion of the child distinctly; the abdomen gradually enlarged in the usual way, and the mammae secreted milk.

About the eighth month, after some extra fatigue, she was seized with labour pains, which continued for the space of three days, during which time she was for the most part confined to bed. The pains then gradually abated, and in the course of a few days she was able to walk about. Three weeks afterwards she was again visited by an attack of labour pains, somewhat similar to the first. These returned at the intervals of two, three, and four weeks, each attack generally continuing very severe during the period of two or three days. She felt no motion of the child after the first attack of labour pains. By and by the breasts became soft and ceased to secrete milk. During the above period Mrs. S. resided in Paisley; she was attended at the commencement of her illness by Drs. Kerr and Low, and afterwards by Dr. Torbet and others. Doubts being entertained as to her safety, and considerable difference of opinion seeming to prevail among the medical gentlemen concerning the nature of her complaint, she, on the 28th of May, 1833, came to Glasgow for the purpose of getting farther medical advice, at which time I was requested to visit her.

Her face was pale, features somewhat sharp, and presented an anxious look, and the body was considerably emaciated. Pulse 120, small; tongue thickly coated with a whitish crust; bowels costive; appetite bad; food often ejected soon after being swallowed. She also experienced considerable difficulty and pain during micturition. Upon examination per vaginam the uterus was found to occupy the upper part of the cavity of the pelvis; it also extended to midway between the umbilicus and ensiform cartilage, and with two fingers placed on the os uteri, and the other hand being applied externally over the fundus of the uterus, it could be moved up and down at pleasure. The lips of the uterus were very thick, and considerably rounded; the neck was almost completely effaced. The os uteri was turned considerably backwards, and so completely obliterated, that the smallest bougie or probe could not be introduced into it past one line. A speculum was introduced into the vagina for the purpose of examining the internal parts more minutely; the two sides of the os uteri appeared to be united and firmly adhering. There was also a feeling of fluctuation communicated to the finger while pressing upon the anterior part of the uterus under the symphysis pubis. The abdomen was considerably enlarged, and presented very much the appearance of that of a woman at the eighth month of utero-gestation, but the left side appeared more prominent than the right, which prominence was not affected by any position of the body; the left side was also much more tender on pressure than the right. About an inch to the left of the umbilicus there was a small circumscribed elevation about the size of a crown piece, where fluctuation was evident, and by pressing on

that part with the finger a hard substance was felt, which conveyed to my friend, Dr. Wilson, and me the idea of a bone, or some part of the fœtus, making its escape through the uterus; there was also so much tenderness immediately over and around that part, that pressure, however slight, could not be tolerated.

Dr. Wilson and I agreed upon the propriety of dilating the os uteri, and for this purpose a bougie armed with a strong wire was used. It was pushed up with considerable force at different times and progressively, till, upon the 3rd of June, it was got into the uterus. A female catheter was afterwards introduced, the os uteri contracted upon the instrument, and no fluid escaped. The sensibility of the os uteri was considerably impaired, and very little pain was produced by the above attempts, till the instrument was nearly introduced into the uterus. As considerable pain and irritation were then experienced, it was deemed advisable not to use any larger instrument until these should in some degree subside. Upon the 5th of June she complained of pains about the lower part of the back, which also extended over the abdomen. On 6th, about 2 o'clock, P.M., severe pains commenced, and were similar to those of a woman in the last stage of labour. During a pain the uterus was felt to contract, when the hand was placed upon the abdomen, but the os uteri did not dilate. About 8 o'clock the pains suddenly ceased, and she expressed herself quite relieved. I saw her about twenty minutes afterwards, and upon examination per vaginam the uterus did not fill up the upper part of the cavity of the pelvis as formerly, but was much smaller, and its neck was now much more elongated. On applying the hand upon the abdomen, the uterus felt extending nearly as high as the umbilicus. Above the uterus several parts of a fœtus was distinctly felt through the parietes of the abdomen. No inflammatory symptoms appeared until the 23rd of the 6th of June. She passed urine more freely, her pulse kept about 88, and her appetite was better. On the 23rd she was seized with severe pain all over the belly, being unable to bear the slightest pressure upon it. Her pulse 120, small and sharp: tongue covered with aphthous patches, which extended also into the throat: bowels loose, and much thirst. These symptoms, in spite of treatment, continued, with very little abatement, until the 29th, when they in some measure abated; but when she moved in bed, or when the belly was pressed upon, she felt very sharp lancinating pains, which she compared to a sharp instrument piercing her bowels. On the 1st July she was seized with bronchitis, accompanied with a copious expectoration which continued for two weeks, but were removed by the usual means. Upon the 4th she complained of considerable pain in a circumscribed part a little to the left of the umbilicus, which appeared a little higher than

the surrounding parts, and felt as if a fluid were contained in it. A small blister was applied immediately over that part, and repeated occasionally. She had small doses of calomel and opium, and every thing possible was done to improve the general health. She was able occasionally to walk about the house, and even sometimes went out for a few minutes. Upon the 28th Aug. she was seized with diarrhœa, which, in defiance of every treatment, continued until the 13th of October, during which time she was for the most part confined to bed. For about eight days before and during the time the diarrhœa continued, she was regularly seized with severe pains in the abdomen every evening, which were relieved by a full dose of laudanum. She had frequent attacks of vomiting of dark coloured bile, her appetite became much impaired, and her body greatly emaciated. She had port wine *ad libitum*, and she frequently used a pint in the course of the day. After continuing the wine for some time, the diarrhœa ceased, her appetite improved, her strength increased, and by the 27th Oct. she was able again to walk about. Her belly was by that time very much diminished in size; but she continued to have severe attacks of pain which required large doses of laudanum for their removal.

In November she walked the distance of a mile and a half to the Paisley Canal Boat, where she was going to visit her husband; but being taken home to her husband's house, she died upon the 24th Nov., after several days of great distress.

Being myself confined at the time, I was unable to attend at the inspection. My brother, however, went to Paisley, and opened the body in presence of a number of medical gentlemen, when the following was found to be the result.

Having detached the integuments from the peritoneum over the abdominal cavity, there were presented, protruding, the parietal bones of the head of the fœtus under the umbilicus. The peritoneum was of a kind of leaden colour tending to green in front. The peritoneal cavity was laid open by a longitudinal incision from the bottom of the sternum to the umbilicus, which exposed the liver considerably enlarged, and of a darker colour than natural. This incision also exposed the two parietal bones, the one inside of the other, and lying within the cavity of the ilium, the peritoneal coat of which was adhering to the peritoneum in front so firmly as not to be separated from it, and was removed along with it. The uterus was also attached to the peritoneum and to the intestines; the fundus of it was wanting, having been totally destroyed by a process of ulceration, and the ulcerated edges of it came in contact with that portion of the ilium in which the parietal bones were contained. The passage from the uterus to the vagina was impervious, which was ascertained by the introduction of a probe. The appendages of the uterus on

the right side were matted together by previous inflammation with a portion of the ilium, which contained a number of the fetal bones; the malar pretty much corroded, the tibia, the temporal, &c. The malar was protruding through the ilium by an ulcerated opening, leading, at first sight, from the situation and adhesion, to the supposition that it, together with the others, was contained within the ovarium. A great quantity of pus was found among the intestines, and the pelvic cavity was filled with it. From the colour of the bowels on the right side a considerable state of inflammation seemed to have existed immediately before death, and in consequence of which bands of adhesion were formed among the convolutions of the intestines.

The bones of the fœtus, with the uterus and part of the adhering intestines, were brought away and are in my possession, where they may be seen. I have still maintained the same opinion which I advanced during my attendance on Mrs. S., viz.—that gestation took place in the usual manner, and that the fœtus escaped from the uterus into the cavity of the abdomen about the seventh month; and I think I am borne out in this opinion, first, from the circumstances of the case as above described; and, secondly, from the state of the parts as exhibited upon dissection. The bones appear as from that of a child at the eighth month of utero-gestation.

I have the honour to be, Gentlemen,
Your obedient servant,
A. MILLER.

West George-street, Glasgow.
May, 1835.

PREPARATIONS OF OPIUM.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,—I beg to acknowledge your kind favour in forwarding a copy of M. Lecanu's interesting paper on Opium. Such discussions conduce to excite experimental investigation, without which we can expect little improvement in pharmacology, or in any other art or science.

I observe that M. Lecanu has summed up, from divers authors, about fifteen different constituent principles in, or belonging to, opium. It is certainly desirable to know all the chemical constituents which, in its native purity, are found to exist in this invaluable drug; but, in such details, the origin of the sample operated on should ever be stated, as whether Turkey or East Indian opium, for these two differ very considerably in respect to their composition, as does the English opium from both.

Another point of still greater moment is that respecting the mixtures of foreign substances; the sophistications appear to be carried

to an extraordinary extent. I have a sample of opium which I take to be full half chocolate: it smells stronger of the latter than the former. I have not analysed it, but I find it requires to be administered in a double dose at least. The more usual addition is a still cheaper one, namely, cow-dung, which, as stated lately by Dr. Sigmond*, is employed to a great extent, whether prior or subsequently to its importation. Now, this might be supposed occasionally to furnish several of the principles enumerated, as the sulphates of lime and potass, extractive and lignine or vegetable fibre. The presence of such substances must of course greatly modify the chemical results. It is therefore evident, that in all researches of this sort the purity of the specimens ought to be a primary object.

I am glad to find that M. Lecanu regards my experiments, or experience rather, on sarsaparilla in a favourable point of view; although duly weighing the prudent caution expressed thereon by the eminent chemist, M. Caventon, who considers that we have not "so incontrovertibly proved" the ill results of heat on sarsaparilla, that we should abandon the use of the syrup prepared by long decoction; a caution, it must be confessed, dictated by sound philosophy. This gentleman, too, has shown a desire to investigate the subject by experiment and induction, the only legitimate guides. Such principles must be respected by every lover of truth, however it may affect private opinions. I must observe, however, that my experiments on sarsaparilla can assume no merit for chemical research; in fact, they were entirely therapeutic, or empirical I should rather say; and I can only lay claim, in this affair, to patient observation, and a faithful record of the clinical or physiological effects of the medicine, having long considered that such modes of investigation are too much neglected, and that undue confidence is but too frequently reposed in mere chemical analysis.

But, again, we are liable to frequent deception by merely taking the reports of patients on the operation of medicines: it is only by becoming ourselves, personally, the subjects of experiment, that such an accurate and intimate knowledge can possibly be obtained, and especially so in respect to that nice discrimination which is necessary in determining the operation of narcotic substances, and, above all, in respect to the *divers*, or *reputed divers*, operations of the different principles of opium. I have followed this method with great advantage, in acquiring a knowledge of various remedies of South America. This, however, is not a work for one man to perform; and the greater the number who may be induced to adopt this method, the more rapidly will a knowledge of the art of healing be advanced.

Excuse these hasty remarks on the paper

* In his Lectures before the Med.-Bot. Soc. (See *Med. and Surg. Journ.* April 4th, 1835.)

enclosed, which I received but two or three hours since.

I am, Gentlemen,
Your very obedient servant,
J. HANCOCK.

*New Norfolk-street,
Commercial Road.*

P.S.—I may observe here, that the recent researches of M. Poggiale have confirmed several of the statements I had made in the paper referred to (*M. B. Trans.*), and especially with respect to the difficult, or very imperfect solubility of the active principle of sarsaparilla in water alone (for the four reputed active principles he finds are one and identical), and its ready solubility in alcohol; secondly, that this active principle, when dissolved, is *very bitter and nauseous*, and therefore not a merely mucilaginous inert substance, as some pharmaceutical writers assert; thirdly, that they are all decomposed in the same manner by heat; and, fourthly, that the *pith*, as well as the bark, contains *salseparine*.—*Journ. de Pharmacie, Oct. 1834.*—(See *Phil. Mag. for Dec. last.*)

BERKSHIRE MEDICAL ASSOCIATION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I beg to inform you that a Society of Medical Practitioners has been formed in Reading, named the "Berkshire Medical Association," for the purpose of promoting the respectability, honour, and general interests of the profession. Petitions have been prepared on the subject of the medical arrangements under the Poor-Laws Amendment Bill, which will be presented to both Houses of Parliament with the least possible delay. There is good reason to believe that they will be signed by nearly every respectable practitioner in the county.

With your permission, I will send you a copy of the petitions, after they have been presented.

I have the honour to be, Gentlemen,
Your obedient, humble servant,
GEORGE MAY, Hon. Sec.

Reading, May 7, 1835.

Reports of Societies.

LONDON MEDICAL SOCIETY.

Monday, May 25th, 1835.

DR. WHITING, President, in the Chair.

ON entering the room, we regretted to find that the President's wish to meet strongly, and come well armed with information, had not the appearance of being verified; this in

part might be attributable to the President and Council of the College of Physicians holding their monthly meeting this evening.

Mr. Bryant (after the reading of the last minutes) requested Mr. Kingdon to inform the members of the progress of a case (we believe he said of scirrhous growth of the testicle, but really from the indistinct manner in which he sometimes addresses the Society, especially when the subject that he wishes to give birth to is far fetched, we are so much engaged in watching his features, clouded in oratorical reverie, that we either do not hear or our recollection sleeps) that he had brought before the Society on a prior occasion; Mr. K. referred us to Mr. Anthony Pilcher, who had the management of the case after the disease had been removed.

Mr. A. Pilcher regretted that it was not in his power to supply the desired inquiry, as the patient had absconded before the curative process had hardly time to commence.

Mr. Clifton informed us that after the operation his health rapidly improved, which antecedently presented a highly cadaverous appearance.

The President then called on Mr. Merion to favour the members with the communication that he had previously promised; this, however, Mr. Merion preferred deferring until the next session.

Mr. Kingdon volunteered to relate the following case, premising that as there were but few members present, and the time had nearly arrived for closing the discussions, he thought we should not be able to pay much respect and attention to the profound and deep reasoning that he (Mr. M.) would employ, and by which he had so distinguished himself in this Society. The patient, a female, the subject of the case, consulted him, while surgeon to the City Dispensary, for an abdominal tumour, which he judged by the feel to be nodulated, and not consisting of several. The relief sought he felt convinced it was not in his power to afford, believing that death only could administer any, as she had already been under the care of several eminent surgeons, particularly Sir William Blizard. He accordingly anxiously looked for that event, as it would relieve the sufferer from her sufferings, and enable him to ascertain the nature of the complaint. She appeared gradually to sink, and early one morning the husband came to inform him that his wife was dying, wishing him to visit her as soon as possible. Mr. Kingdon complied, and by so doing trusted to ensure the post-mortem examination. In this, however, he was frustrated by the kind interference and assistance of nature, for the patient passed by the bowels an immense quantity of hydatids, some very large, and myriads of small ones, which produced exhaustion next to death; but, by the aid of brandy to stop the faintness, and cordial medicines prescribed, she rallied, and got completely well, in which state, for aught he knows, she still remains.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 26th, 1835.

HENRY EARLE, Esq., F.R.S., President, in the Chair.

Mr. CLINE, curator of the museum of the Royal College of Surgeons, and Dr. Faraday, lecturer on chemistry at the Royal Institution of Great Britain, were proposed by the President and Council as honorary members of this Society, and their names were accordingly suspended in the rooms for ballot at a future meeting.

This evening only the first portion of the paper by Dr. Simms, physician to the Marylebone Infirmary, "On Hypertrophy and Atrophy of the Brain," was read, owing to its length, which occupied the whole of the time set apart for the meeting. Therefore, instead of reading the remaining part, on atrophy, it was unanimously resolved that an extraordinary meeting should be held this day fortnight at the usual hour, for finishing it, and also the other papers which had been received.

The author in his paper first took a retrospective view of the writers and their writings who have written on this hitherto much neglected branch of pathological anatomy, awarding to each merit in proportion to the intrinsic value of their productions, very little of which fell to the lot of our countrymen, who, almost exclusively, have confounded the morbid changes so characteristic of the morbid condition of hypertrophy with other lesions of the brain. On this interesting subject Dance is entitled to the credit of having first pointed out its distinct existence, in an essay which was published by Breschet, in the *Repertoire d'Anatomie Pathologique*, wherein are detailed four cases which agree in all their important points with the cases given by Andral in his admirable *Clinique Medicale**, which, together with Dr. Copland's *Dictionary of Practical Medicine*, will fill up a chasm that has long been wanted in the medical literature of this country. The immense mass of information that Andral's *Clinique Medicale* contains, compels us to refer our readers to his observations on hypertrophy of the cerebral hemispheres, and by so doing they will be put in possession of every fact contained in Dr. Simm's excellent paper (which alone would rank the Doctor as one of the first pathologists of the present day) and will have conveyed to them a fuller or more distinct account of hyperæmia, or simple enlargement of the brain, than what we are able to give from the author's, into which two divisions the first part of the paper was divided.

* Dr. Spillan, for the benefit of the English student and practitioner, has sent forth an able translation of this report of medical cases, now in the course of publication.

Dr. Whiting was anxious to hear the Society's opinion in a case of hydatid of the liver now under his care; and from what he had heretofore observed of the appearances presented at post obit inspections, that, if the hydatids could escape, the patients' lives in all probability would be saved, and which he thought would be the result in the present instance, as the general health was but very little impaired, and the digestive organs but slightly deranged, and as fluctuation was very perceptible, indicated the close proximity of a hydatid to the surface.

Mr. Kingdon reasoned from the result of cases that ended satisfactorily, from spontaneous openings below the diaphragm, and where adhesions formed between the diseased parts of the parietes of the abdomen, that no doubt any assistance that art could afford it would be advisable to adopt; but still he cautiously avoided giving a decided opinion, and at the same time wished it be understood that he did not rise with the intention of doing so.

The President desired to know of Mr. Kingdon, what symptoms would lead us to infer that the adhesions had formed? The reply we could not understand from the confusion caused by some members leaving, and the speaker among the rest, after which

Mr. Headland made some observations on the propriety of making an opening for the escape of the hydatids, and Mr. Roberts related some cases simulating cholera, when the Society adjourned.

In the course of the evening we were presented with a circular, ordered to be distributed by the Chairman, Dr. John Conolly, and a committee of gentlemen, members of the Shaksperian Club of Stratford-upon-Avon, "who are anxious to preserve the monument of Shakspeare from all future injury, and, if practicable, to restore its original colours, and those on the full-length figure of John Coombe, the friend of Shakspeare, and buried near him, and whose monument is similarly defaced. It would also exceedingly gratify them to be able to restore the ancient roof and painted windows, to clear the walls of unnecessary white-wash, and to secure the foundations of the chancel itself, &c., &c.

"It is proposed to effect these objects by voluntary donations, not exceeding one pound each, which will be received by Messrs. Smith, Payne, and Co., Bankers, London. A book is prepared by the committee, in which the names and places of abode of the donors will be carefully preserved. This register, it is trusted, will for ever remain a gratifying proof of the general interest excited in the nineteenth century, by a proposal to do late honour to the only mortal remains of one whose works have cast an un fading glory over the literature of England."

The author, after weighing the merits of those writers who have preceded him on this subject, apologised for being able to offer to the Society only a dry detail of cases; he added, first, fifteen, the three last of which were only partial cases of hypertrophy. The anatomical lesions or change of structures constituting the hypertrophy are, first, an obliteration and flattened state of the convolutions of the nervous mass, the convolutions being pressed one against the other, so that the sulci or anfractuosities are not distinguishable; secondly, a dryness of the arachnoid and pia mater membranes; thirdly, the anæmic or bloodless condition of the brain, with a greater development and density of its substance, resembling the albumen of egg hardened by boiling, or, as compared in some cases by the Doctor, cream-cheese; fourthly, an almost empty and nearly obliterated state of the ventricles; fifthly, tension of the dura mater, as if pressed by the enlargement of the brain from within outwards; sixthly, a morbid hardness, like the brain, of the corpus callosum, fornix, and septum lucidum, the pons varolii and cerebellum being found invariably unchanged in texture and appearance.

In Case 1 there was hypertrophy of the brain, and the patient died of enteritis; and, what is not a little remarkable, although the brain was double the proper size, no symptoms as indicative of the abnormal state of the brain manifested themselves during the last illness.

Case 2. Hypertrophy of the brain; death from extravasation.

Case 3. Hypertrophy; death from convulsions, accompanied with stertorous breathing.

Case 4. Hypertrophy; died suddenly after rising from bed; vessels of the dura mater were tinged with blood.

Case 5. Hypertrophy; phthisis pulmonalis, ramollissement.

Case 6. Hypertrophy of the brain; heart flaccid; died suddenly.

Case 7. Hypertrophy, with granular disease of the kidney, and dropsy; died of erythematous inflammation of the upper extremity, &c.

Case 8. Hypertrophy of the brain; congestion.

Case 10. Hypertrophy; death from cholera.

Case 11. Hypertrophy; whooping cough; pneumonia.

Case 12. Hypertrophy; death from cholera.

Case 13. Hypertrophy of one hemisphere only, with two old apoplectic cysts.

Case 14. Partial hypertrophy.

Case 15. Partial hypertrophy; death from delirium tremens.

The author then offered some valuable remarks on the above cases, especially as regarded the state of the brain, the intellectual condition of the patients as referable, although not always present, to the deranged condition of the former, with the disturbance of the latter.

Next followed a table of two hundred cases

of patients who had died of various diseases, giving the average weight of the brain from a few days old, taken from the smallest and largest weights of a certain number up to the maximum increase of weight of forty to fifty years, when it gradually decreases as life advances in the scale. Then followed some remarks and objections on the mode of judging of the due weight of the brain, according to the weight of the body; and, lastly, followed the summary of sixteen cases of simple enlargement of the brain (hyperæmia), and the respective weight of each, which concluded this elaborate portion of the author's researches.

CASE OF ANEURISM OF THE BRACHIAL ARTERY CURED BY COMPRESSION.

BY J. W. HEUSTIS, M.D., OF CAHAWBA,
ALABAMA.

On the 27th of January, I was called to visit the wife of M. M., who was represented as having a swelling or rising on the arm, in consequence of bleeding. On arriving, I found that a large and diffused aneurism had formed at the bend of the arm. The tumour occupied a diameter of about three inches, with a projecting pulsating apex, over which the skin was extremely thin, and through which the blood could be distinctly perceived whizzing and thrilling at every pulsation. The pain of the limb was excessive, so that for the last three or four days sleep had been entirely prevented. The history of the case was as follows:—The woman was in the advanced stage of pregnancy, and to relieve the usual unpleasant symptoms occurring on such occasions, recourse was had to venesection. The operation was performed by a neighbouring farmer, an old gentleman, destitute of scientific knowledge, but whose experience in that line had been considerable, and hitherto successful. The nature of the accident, however, remained unknown; nor, although there was considerable difficulty in stopping the bleeding, was it supposed that any alarming or extraordinary occurrence had taken place. The external orifice healed, and the woman, who was in the lower circumstances of life, resumed her usual domestic occupations, which were rather laborious and fatiguing. In a few days, a throbbing tumour made its appearance at the place where the operation of bleeding had been performed. For several weeks this produced but little uneasiness, and therefore received but little attention. At length, however, from a small, compressible, circumscribed tumour, a diffused hardness and swelling took place, occupying nearly the whole bend of the arm. Great pain and lameness now ensued, and the limb was deprived of the power of muscular exertion.

Such was the situation of the patient when

I saw her. I immediately explained the nature of the case and accident, and informed the family of the necessity of an immediate operation. The patient wept and shuddered at the cruel alternative, though had I been urgent she would have finally submitted. She was within a few days of her confinement, and it was dreaded that an operation at the time might have had an unfavourable effect upon her situation. I therefore told them that there was another, though a doubtful expedient; that no injury could result from its trial, although I apprehended that the case was too far advanced to admit of any permanent relief being obtained in any other manner than by taking up the artery. At least it was hoped that time might be gained, so as to postpone the operation till after the accouchement. The expedient proposed was compression; this was, therefore, acceded to, though on the part of the husband with the apprehension, that the expense of another visit, and an operation, must be finally submitted to.

I now proceeded to make compression on the aneurism and brachial artery, in the following manner. I took two twelve and a half cent pieces, and a twenty-five cent piece, and wrapped them in a rag, so as to prevent their slipping. I then made a thick linen compress, and wet it with a solution of sugar of lead; this, with the silver next the tumour, I applied over the aneurism, and secured by a bandage, as in cases of tying the arm after ordinary venesection, but much firmer and more securely, by repeated turns of the bandage above and below the elbow. Having applied the necessary degree of pressure in this manner to the aneurism, I proceeded also to make a degree of compression upon the brachial artery; for this purpose, another thick compress, four or five inches in length, wet with the saturnine solution, was laid along the course of the artery, and bound down with some degree of firmness by numerous turns of a tolerably broad bandage. This last application was for the purpose of diminishing the impetus of blood into the aneurismal tumour. Upon applying my fingers to the radial artery, I found that its strength and force were considerably lessened. I now left the patient, with directions to see that the bandage did not become too loose, and, if so, to readjust it with such a degree of tightness as she could endure without much pain. I neither saw nor heard from the patient till the expiration of a month. I then saw her husband, who expressed many acknowledgments, stating that my directions had been faithfully followed, and with the most fortunate success; that the swelling had almost entirely disappeared, and that the pain of the arm had ceased; that his wife had commenced using her hand, and considered herself almost completely well; although, for fear of a return of the aneurism, the bandage was still retained.

I had previously found the efficacy of pressure, in a wound of an artery from bleed-

ing. This happened in my own practice, in the case of a negro woman. The scarlet arterial blood flowed out *per saltum*. With some alarm I was in haste to tie up the arm, which I did with a compress over the wounded vessel in the manner above described. A firm pressure was in this manner applied, until the orifice had healed, which it did in the ordinary time after vesication, without any disposition to the formation of an aneurism.

The manner in which pressure operates in the cure of aneurism, appears to admit of easy explanation. It has been proved by experiment and observation, that in tying an artery a coagulum of blood is found immediately behind the ligature, filling up the calibre of the artery, so that, were the ligature removed after the formation of this coagulum, no hæmorrhage would or could take place. Now in the case of a wound or rupture of an artery, the blood escapes from the vessel, and continues to distend the sheath, and cellular substances surrounding it, forming a coagulum exterior to the wounded artery, but of no avail in preventing the exit of arterial blood. If, however, the force of the blood can be impeded, and its gush from the wounded orifice suppressed, a coagulum is found in the immediate vicinity of the wound, and an opportunity thereby given for the healing of the latter.

Although several cures of compression have been related in contemporary journals, still such instances are looked upon as extraordinary, and rather accidental, and not sufficient to warrant the practice as being generally applicable and expedient. From the cures, however, that have been effected in this manner, I think we are fully and more authorised in its employment, in all cases of brachial and popliteal aneurism, or whenever the contiguity of a bone affords sufficient resistance for its application. It is true, that in the hands of ignorance and incompetence such practice might be productive of serious and dangerous consequences; but for sacrilegious assumption and intrusion, licensed and unlicensed butchery and murder, this advice is not intended; the field of their operation is already sufficiently extensive, without opening new avenues for death.

In the Philadelphia Journal of Medical and Physical Sciences, No. 4, new series, p. 363, the reader may find a variety of ingenious contrivances for making compression in cases of brachial aneurism, by W. B. Fahnestock, M. D. and among others a kind of truss, fitted to the arm with an elastic steel spring, on the principle of the common truss for scrotal hernia. Dr. F. reports a case of brachial aneurism successfully treated by the application and use of this machine. A contrivance of this kind may be found advantageous, although I have experienced no difficulty in retaining to its place, and with sufficient accuracy and firmness, the common bandage previously mentioned.

THE

London Medical and Surgical Journal.

Saturday, June 6, 1835.

THE QUESTION BETWEEN THE POOR LAWS COMMISSIONERS, THEIR OFFICERS, &C., AND THE MEDICAL PROFESSION.

THE dissatisfaction expressed by medical practitioners in different parts of the country, with the conduct of the Poor Laws authorities towards them, is on the increase. Discontent has, in some instances, produced remonstrance, but, we believe, without any beneficial result hitherto. Commissioners and overseers alike seem to regard the services of the medical attendant on the poor as of little consequence, at least such we may judge to be the case from the scale of remuneration which is proposed for them, and which may very well be denominated a mere mockery of payment. Where, we should like to be informed, did those gentlemen who superintend the *comforts* of the poor learn how to estimate the utility of our profession? By what system of calculation, we beseech them, have they determined our value at only a trifle plus zero? Is it from the great *celerity* and *ease* with which we pass through our educational curriculum, the very *trifling* expense which attends our obtaining the proper qualifications to become their humble but efficient—their zealous but ill-paid servants? Or is it because, having already done more than any other class of men in the way of *charity* towards the poor, they are of opinion that we should be ground down a little more in that direction? We confess that a little more information from the gentlemen in question on these points would be highly acceptable to us, as we apprehend that much ignorance prevails

among them respecting the difficulties and toil we undergo.

In some of the unions, we understand, the guardians of the poor have *liberally* offered to retain those practitioners who have formerly served the different parishes. The conditions of continuance, however, were not very inviting. It was proposed that the sick should be attended at so much (two or three shillings) per illness, without regard to its duration, and to this generous offer was appended the threat that *if* it was not accepted forthwith, advertisements should be inserted in the newspapers for “Young Gentlemen,” who would gladly undertake the *job*. The absurdity of this mode of recompensing their services struck the gentlemen who were insulted by the proposal. They exposed its injustice and rejected it. Upon this the guardians of the poor resolved on what, considering their parsimony in the first instance, must be pronounced a most desperate piece of prodigality.—They tendered some twelve or eighteen pence more per case. This, too, was scouted by most of the indignant practitioners in question. The threatened advertisements were accordingly inserted, inviting the *JUVENILES* to “contract.”

That contractors at any price for the ungrateful drudgery proposed to be inflicted will be found, we do not doubt. We may regret that such should be the case, but, unfortunately, our profession, thanks to the absence of any salutary law to check its morbid growth, has become overstocked, and abounds with men, both young and old, who possess no pecuniary means to establish themselves, and who are ready to undertake any thing. Men whom parents and guides, thoughtless of the future, once consigned to the encounter of difficulties from which they can now no longer escape, though heartily

sick of them, and sorry for the want of foresight which placed them in such a predicament,—men who have from these causes, although qualified and meritorious, no alternative but to step behind a counter for a miserable pittance, or to accept such an office as the guardians of the poor now vouchsafe to proffer.

We would remind these gentlemen, however, that to undertake is one thing, to perform another. Nothing can be easier than the former, the latter requires some stimulus, and we put it to their consciences whether the stinted allowance awarded by them in most of the unions for medical attendance, is a sufficient spur to keep awake the energies of those whom they may engage for that duty? Do they consider the paltry sum of two or three shillings per case of illness, taking the average duration of three or four cases, any thing like an equivalent for the care and skill which are demanded in the treatment, or for the time and toil which must be expended by the practitioner during his attendance. If they answer in the affirmative, then we say, that although their judgment in the provisioning of a parish workhouse, or the measurement of a pauper's allowance, may be unerring, they know little of the obligations which are due by the community to the medical body, and nothing of the mode in which they should be compensated. If their reply be in the negative which, by the by, we cannot expect from even their candour, but which we take leave to supply, then their guardianship of the poor dissolves into an empty song; for the inference must be that they care not a fig for *efficient* medical aid, but would be satisfied with its *semblance*. And even this, perhaps, they might feel inclined to dispense with, were it not that the law renders imperative either the substance or the shadow.

Again, we would enquire of these authorities what they perceive in our profession which induces them to degrade and insult it? Are the rank and utility of professors of medicine in society, perchance, so low, that their services must be paid for at a meaner rate than a porter's? Are they (which God forbid) less of gentlemen than those Commissioners and their assistants, &c., and, therefore, to be looked down upon? Is their responsibility less than that of either of these governing functionaries? Not a whit of either. Medical men, taken as a body, are their equals, and in many instances their superiors. Their responsibility, since the springs of life and health are frequently to be regulated by their hands, is, at least, as great as that of any of the select ruling powers over the poor, and their value to the latter, at the lowest estimate, rises to a par with that of any of those employed to serve and protect them. And if this be the case, as it is, why should their labour be held at so trifling a price, when compared with that of others less indispensable? Why, for instance, should an assistant commissioner under the Poor Laws Act receive 1000*l.* per annum, while the surgeon is expected to rest satisfied with a tenth, or even a less portion of that sum? Would it be attempted to remunerate a member of any other profession after this rate? Would a lawyer take up his pen to scrawl only a few lines for the trifle which is now offered to us for perhaps a month's attendance on the case of a sick pauper; or would a clergyman, whose duty is

“To bury these, and christen those,

And marry such fond folks as chose,”

take horse and ride a dozen miles to perform either of the above ceremonies without a more ample fee? In a word, is it likely that the activity and energy of a

medical practitioner would be kept alive, or dwindle and perish under the chill shade of such treatment? We have said, and we repeat it, that we have no doubt but a sufficient number of contractors among the younger branches of the profession will be found to undertake the onerous duties of the different unions; but how far their performance of those duties under the encouragement afforded will be effective and satisfactory remains for time to prove. And we are of opinion that a very short period only will be required to convince the Poor-Laws authorities and the public of their error; to exhibit the impolicy and folly of reducing to a despicable minimum the remuneration of men with whose services they cannot dispense, and whose zeal and education are worthy of a more liberal reward.

A few words more.—We are given to understand that, in one of the districts in Kent, the old-established practitioners have tendered their services gratis to the guardians of the poor. This, it is said, they have done in order to prevent the influx of such of their younger brethren as might, by accepting the office, become by possibility their competitors in practice. We feel reluctant to believe this; but, if true, such conduct is a sacrificing of the *esprit de corps* with a vengeance, is highly impolitic and indefensible. We have heard a few of the arguments adduced in its favour, but cannot accede to the validity of any one of them, and sincerely hope so senseless a principle will not in any future instance be acted upon. Large salaries are prodigally lavished in their department on officials, whose duties are not half so arduous as those of the surgeon. And why, we ask, should he alone go unremunerated? Why should the working bee starve while the drone fattens?

BERKSHIRE MEDICAL ASSOCIATION.

WE are glad to direct the attention of our readers to the letter which will be found in our present number, of our correspondent from Reading, announcing the formation there of a society of medical practitioners, whose object is the promotion of the respectability, honour, and general interests of the profession. This is as it should be. Let but our brethren bestir themselves for the advancement of their mutual interests, and the clouds of pride, prejudice, and ignorance, which have hitherto obscured our medical institutions, and rendered them pests instead of benefits, shall be driven away. Union and concentric movements have long been wanting to our body; and, when these are established, the improvement of the general condition of practitioners will rapidly follow. The progression of the sciences of surgery and medicine, of far more consequence than the dignity of either of the Colleges, will receive an impulse which shall be felt far and wide. The cause of medical reform, aided by such associations as that under consideration, is certain of a speedy triumph; for it will be shown that unanimity on that head prevails among us, and that the body to be reformed wills its own reformation. Let the members of our profession be only true to themselves; let them but exhibit that energy and activity which become the importance of the stake for which they contend, that is, the vindication of their rights and interests, and the advent of a thorough amelioration of their condition must quickly arrive. It will be perceived that one of the first acts of this Society has been to prepare petitions to both Houses of Parliament on the subject of the Poor-Laws arrangements affecting our profession.

In our last number we recommended that since almost all public bodies, whether professional or commercial, associate themselves in one form or another for the purpose of legislating for their mutual protection, the members of our profession should follow so excellent an example; and we rejoice extremely that the practitioners of Berkshire have adopted it. Let similar associations be set on foot throughout the country, and we predict the *veteris vestigia flammæ* of our profession shall, within a very short period, ignite and burn brilliantly again; our science, one of the most honourable and useful to mankind, emerge from the obscurity with which imbecile institutions and barbarous laws have hitherto eclipsed it. We hail, then, the Berkshire Medical Association as an indication of true reform.

THE COLLEGES *versus* THE HALL.

THE Colleges of Physicians and Surgeons have now a rare opportunity to work up their lee-way. Their "order of the day" has been, up to the present time, "postponement." Let them reverse it, and assume that of "no delay," and either do something or *appear* to do something, that the *College* of Apothecaries may not carry off all the glory which should pertain to the reformers of medical education.

We are informed that there has been a stir among the chiefs of the two aristocratical corporations, and that their wrath at the immense stride their democratic younger rival has achieved is not by any means trifling. They gaze with astonishment at the terminal point, the *ne plus ultra* of the Company's career, and marvel greatly at the tenour and extent of its final manifesto.

Let the Colleges, however, but arouse themselves out of their drowsy slumbers,

and set about honestly rectifying their abuses, voluntarily correcting and reducing their mischievous influence, and amending the defects of their misgovernment, while they preserve, as far as possible, what may be found useful in their laws and regulations, and they may yet leave as far behind them, as they ought always to have done, their ambitious rival of Blackfriars.

PROGRESS OF MEDICINE IN CAIRO.

CLOT BEY, in a letter to M. Jomard, states that he has just obtained the establishment of an anatomical theatre, even in the Mosque of Moristan. A skeleton and anatomical preparations, belonging to Dr. Auyoux, have served to lecture upon. We now see anatomical science united to that religion which has been most opposed to it. Is not this making progress?

The plague continues at Alexandria, but does not make great ravages. Only five or six persons are attacked on each day, and these are generally from the poorest classes, or Maltese, who are the dirtiest and worst lodged of all the inhabitants of Cairo. The disease seems to hover round certain spots, which leads me to believe that it proceeds from local causes of infection. No one has been ill out of Alexandria, an evident proof that the plague is not propagated by the simple contact of individuals or things.

Foreign Medicine.

On the Employment of Nux Vomica and its Preparations in Dysentery.

THE able editor of a foreign cotemporary the *N. A. Archives of Medical and Surgical Science* states that, having been particularly embarrassed and disappointed in the management of dysentery during the two last autumns in the Baltimore Infirmary, he has been within a short time induced to make trial of the *nux vomica* in some cases of this disease. "We have as yet only had an opportunity of using it in a few instances," he observes, "and those not of the worst character, yet so difficult to manage, that some of them had previously resisted all our remedies. The cases selected were those which were not attended with much febrile excitement, but which were characterised by frequent calls to stool, considerable griping and bearing down, and an inability to pass anything but mucus, or that material streaked with blood. In some of the cases, the remedy, though certainly beneficial,

was not competent alone to accomplish a cure; in others its good effects were so striking, as to inspire considerable confidence in its virtues, and to induce us to make this notice, and with the view of inciting others to give it a fair trial under similar circumstances. We do not wish to recommend it to the exclusion of other means, or to inspire a hope that it will be found capable of itself of curing the disease in a large number of cases; but, from what we have seen of its effects, we feel assured that it will be found a useful adjuvant, and that in some cases, at least, it will afford relief when other remedies fail.

“We commenced at first by administering the nux vomica in powder, in doses of seven grains three times a-day, as recommended by Vaux, of Ipswich, England. In one individual to whom the article was administered in this form, the good effects were prompt. The griping, tenesmus, and frequent calls to stool were speedily checked, the discharges became natural, and the patient, who had suffered much, and had failed to obtain relief from the treatment previously prescribed, expressed himself delighted with the remedy. It was also beneficial in other cases, as were the alcoholic extract of Pelletier, administered in doses of two grains a-day, and the strychnia, given in the form of an acetate, in doses of one-twelfth to one-sixth of a grain, formed by dissolving the strychnia in acetic acid. Our comparative trials of the different preparations of the article have as yet been too limited to enable us to decide which deserves the preference; but we are inclined to prefer the powder, and next to that the extract. It will, perhaps, be beneficial to combine with whatever form is employed a small quantity of opium, or some of its preparations.

“The good effects of nux vomica in several of the affections of the mucous membrane of the digestive organs have long been known, but it is highly probable that the remedy has not been as generally employed as it deserves. Hagström, a Swedish physician, was, we believe, the first who recommended it in dysentery, and his testimony in its favour was of the most flattering character. The celebrated Hufeland states that he derived great benefit from it in the treatment of epidemic dysentery; and Thoman remarks that he has seen it effectual in allaying the tormina, and abating the inclination to go to stool. Richter observes, in reference to the efficacy of this remedy in dysentery, that the extract, like opium, tends directly to allay the irritation of the alimentary canal, and subjoins, that, combined with the article just mentioned, it proves beneficial where opium alone fails to do so. The following is the form in which he administers it:—

R. Extract. nucis vomic. ℥ss.
Mucilag. gum mimos. ℥j.
Aqua font. ℥vj.
Syrup. althæi, ℥j.—M. S.

Two tablespoonfuls every two hours.

“By Most, a recent writer, this article is especially recommended in what he denominates *pituitous dysentery*, and he remarks that, when the disease is protracted, the article may be administered in the following form for several days in succession with great advantage:—

R. Nuc. vomic. ℥j.

Infunde in aqua ferv. qs.

Digere per ½ hor. ut reman. ℥vj.

Col. adde tinct. opii simp. ℥ss.—M. S.

A tablespoonful every two hours.

“We find the following very flattering account of the efficacy of nux vomica in dysentery, in Armstrong’s lectures, recently published. ‘A friend of mine, Mr. George Vaux, of Ipswich, has tried a remedy for sixteen years, in about two hundred cases (i. e. in dysentery) and the result has been so successful, and so remarkably uniform, that I feel it my duty to mention the treatment here. This gentleman gives in dysentery, or inflammation of the mucous membrane about the colon, seven grains of nux vomica thrice daily. It neither purges nor constipates, but removes the inflammation, and healthy evacuations follow. Mr. Vaux, who resides in London, bears similar testimony to the value of the remedy, and I strongly recommend it to your notice. I shall certainly try it in the next case I meet with. It seems to operate as a sort of specific.’

“By M. Frisch, a German physician of celebrity, the remedy is highly recommended. He remarks, that in those forms of diarrhoea, dependent upon a subacute inflammation of the mucous membrane of the intestines, which are attended with frequent discharges of tenacious mucus, and much griping and tenesmus, no remedy is so effectual as nux vomica. Its efficacy in diarrhoea has also been testified by others. In a case of chronic diarrhoea, in an individual of a nervous temperament, Professor Récamier administered the alcoholic extract of nux vomica, in doses of one-eighth of a grain, with complete success after various remedies had been resorted to ineffectually.

“From these remarks it will be seen, that the remedy is at least deserving further trials. To expect it to perform the part of a specific would be an absurdity, nor would it be reasonable to expect much from it in the acute stage of dysentery. But after suitable depletion, and especially when the disease is verging upon a chronic form, we doubt not it will be found useful. Our own experience with it, as yet, has been limited; but we propose to give it a fair trial, and in the mean time, as truth is our only object, we shall be glad if these observations should serve to induce some of our professional brethren to test its efficacy.”

Climate of the Havana.

BY H. FERRINE, M.D.

The “Historia Economico-politica y Estadística de la Isla de Cuba,” (printed by the

Widows of Arazoza y Soler, Printeresses of the Government, &c., Havana, 1831,) by Don Ramon de la Sagra, Director of the Botanical Garden, Professor of Agriculture, Botany, &c., &c., contains, at p. 37, a table of the medium monthly temperature of that city, from the beginning of 1825 to the end of

1829, inclusive; and as you may not have the book at hand in Philadelphia, I extract it, to aid the "momentous inquiry" commenced on p. 178 of your journal, for May, 1833, to select the best winter residence or resort for invalids seeking uniformity of temperature.

Centigrade Thermometer.

Months	1825	1826	1827	1828	1829	Average.	Fahr.
January .	21.42	21.70	21.80	24.20	21.70	22.18	71.94
February .	22.85	25.02	24.30	25.50	22.70	24.07	75.32
March .	33.72	22.06	24.47	24.20	23.00	25.49	77.88
April .	24.15	25.42	25.90	25.50	24.60	25.11	77.19
May .	25.06	24.70	26.90	26.30	25.20	25.63	78.13
June .	28.12	28.50	27.79	27.60	26.20	27.61	81.75
July .	28.22	27.00	28.12	27.54	27.00	27.57	81.62
August .	25.35	27.86	27.20	28.47	26.50	27.07	80.72
September .	28.52	27.88	26.80	26.00	26.00	27.04	80.67
October .	27.35	26.58	26.00	26.50	25.00	26.28	79.30
November .	23.54	23.02	24.70	25.50	23.00	23.95	75.21
December .	21.62	20.03	23.03	23.50	24.00	22.43	72.37

By comparison with St. Augustine and Tampa Bay, Florida, in the form of your table, viz. mean temperature. Difference between mean temperature of coldest and warmest months, and mean temperature from October 1st to March 31st.

St. Augustine	72.23	27.34	65.55
Tampa Bay .	72.37	22.02	66.41
Havana .	77.67	9.81	75.32

The mean of five years is hence forty-one hundredths less than you quote it, and five one-hundredths less than that of Vera Cruz, whose mean difference of heat and cold you give as 10.80, or nearly one degree more. Being so much further, the variation should be proportionally less, did it not suffer by the northers from the adjacent Cordilleras. The force of these winds from the mountains is so much weakened from crossing the Mexican Sea to Campeche, that a wreck in this bay has been never known, and their temperature so elevated as to make the slight impression on the thermometer noted in my Register for March, 1830, and the present February. A table for the whole year would hence present a uniformity of temperature superior to that of Havana, which is still more improved in the political capital Merida of the interior, a city, by the by, resembling Philadelphia in the regularity of its streets, and with a population estimated at from thirty to forty thousand inhabitants. But above all, on the east coast of Yucatan, the beautiful little Island of Conumel should form a still more desirable winter asylum for wandering invalids, were it supplied with a suitable population. A temperature, however, between that of Tampa Bay and Havana is sufficiently salutary for the most delicate patients who will, during the first winter at least, be scarcely sensible of the changes which now to me convey the sensations of heat and cold. Indeed, at Key West you perceive that the medium temperature of the month of June is 82.11, or .36 higher than that of Havana.—*American Journal.*

On the Adulteration of the Oil of Aniseed.

M. Dubail stated at a meeting of the Societe de Pharmacie of Paris, that adulterated oil of aniseed had been sold lately to several chemists. He had submitted it to analysis, and found it to consist of 5 parts of essence of aniseed, 10 of soap, and 85 of alcohol at 34° or 35°; the whole was covered by a layer of pure essential oil. A druggist had given him some oil with which he had been supplied the preceding winter, and in which there were 20 parts of soap, in order to imitate the frozen condition of the oil in cold weather. M. Dubail reminded the Society of an adulteration of the essence of roses which had been perpetrated some time since, consisting of a solution of gelatine, the surface of which was covered with the real essence of roses.

British Hospital Reports.

NORTH LONDON HOSPITAL.

Clinical Remarks on Nephritis and Chronic Glanders in the Human Subject.

BY PROFESSOR ELLIOTSON.

AFTER making some very practical observations on a well-defined case of nephritis, the predisposing cause of which arose from a blow, which the patient had received two years previous to the attack, Dr. Elliotson made a few judicious remarks on the use of cupping and leeches, together with the aid of mercury, in arresting the progress of the disease. The patient in question, after all the inflammatory symptoms of the kidney had subsided (said the Professor), complained of pains in the thighs and legs, taking the course of the large nerves descending in these regions, which are very frequently consecutive and extremely troublesome. When this is the case, after the inflammatory state of the kidney has been checked, one of the best

remedies, that I know of, is the application of croton oil. This remedy, as many of you must have observed in my wards, produces almost an instantaneous vesication. In most cases two applications are necessary, sometimes one will suffice, and occasionally several will be needful to produce the desired effect, but in the generality of cases two applications are found sufficient. It acts by producing a sudden violent inflammatory condition of the skin which speedily vesicates. These vesicles or pustules for they are between both (containing a half puriform and half watery fluid), last usually two to three days, and rapidly desquamate. This latter process may be rendered more speedy by the application of a small portion of zinc ointment. Croton oil as an external application is extremely simple and useful, and well worthy of your attention. The case altogether is extremely interesting, first, in showing how long an organ may rest tranquil after receiving an injury before the effects of the injury manifest themselves; and, secondly, from its symptoms being so well marked, and their speedy dissipation by the use of active treatment.

There is another case of equal interest, and one to which I particularly wish to draw your attention, as it is a disease, which until very lately was not credited to take place in the human subject. Several of them have now occurred in my public practice, and within the last month I have had an opportunity of witnessing two more. The disease that I am speaking of is *chronic glanders*. It occurred in a man named Thomas Gee, an ostler, who had been accustomed to groom a glandered horse. He was admitted into this hospital on the 30th of April last, when he stated that frequently, when grooming the horse, the discharge from the animal's nose became smeared about his hands and coat sleeves, and, unconscious of the danger that might arise, he frequently would wipe his nose with the sleeve of his coat. His master, too, who frequently also handled the horse, was guilty of the same act of imprudence. Now, previous to his admission in this hospital, I attended the master for a very offensive discharge of the left nostril, it had a glutinous appearance, was accompanied with much itching, and on my asking him whether he had been amongst horses, he told me the same story as this man did on his admission into the hospital. The discharge from the man's nose was precisely of the same character as the master's; it was so exceedingly offensive, that he said he could scarcely endure himself, and every one that came near him was quite disgusted. There could not then exist the least doubt as to the nature of the disease; for both master and man who had been in the habit of cleaning the same horse, were affected by it. It was not the discharge from the nostrils that proved the existence of the disease, for in many affections there may be a great secretion from the nasal organs, but the peculiar horrible offensive odour

which was combined with it; and the affection being confined only to one side, particularly caused me to expect the existence of glanders; for it is a very curious circumstance, but, in this disease, one side of the body is always more prone to the effects of the poison than the other.

The Germans, previous to our observing the disease in this country, related several instances of its occurrence. The first two cases that caused my suspicion of its existence, occurred in St. Thomas's Hospital, and these were not sufficient to convince the other medical officers of the authenticity of the disease, and it was not until some time afterwards, when another case presented itself, and one, in which the symptoms were precisely similar to those I before suspected were glanders, and, moreover, exactly corresponded to the description of those related by the Germans, that medical men became satisfied of the existence of the affection in the human frame. When I saw this man at St. Thomas's I said to him, "You have been amongst horses," and he immediately answered me in the affirmative. Since then, I believe, not the least doubt is entertained but that human beings are liable to take this disease, not, however, unless there is some actual contact,—unless, indeed, the poisonous matter comes in contact with an abraded surface of the skin, or with a mucous surface of the body.

Now, gentlemen, this disease may occur under four different forms; indeed, we are liable to four different kinds of this affection. We may have simple, acute, or what is termed *true glanders*, only attacking the nasal cavities, the larynx, and trachea, which is one form; and we have it attacking different parts of the body, speedily arising in small tumours, which is termed *acute farcy glanders*, as a second form: these may come separately and exist separately, or may both be produced at the same time. Again, each of these may occur in a chronic form.

Simple Acute Glanders.—In the acute form of that disease termed *true glanders*, the patient complains of much heat about the nasal organ and windpipe, there is violent thirst, excessive discharge, which is of a most horrible and offensive character, and phlyzaceous pustules appear in the different parts of the body. It lasts but for a very short period before the patient falls a victim to its effects. On a post mortem inspection, irregular ulcers are detected in the air passages, and the frontal sinuses are filled with a glutinous matter of a brownish colour, and their lining membrane is studded with small white tubercles.

Acute Farcy Glanders.—This disease, which, like the acute simple glanders, is confined to one side of the body more than the other, is usually preceded by pains about the limbs, which may be mistaken for rheumatism. Small tumours arise in different parts of the body, and have a glossy red appearance; one side of the head is usually affected by them.

These tumours, which are extremely painful, soon suppurate, and fall into a state of gangrene: they are accompanied also by phlyzaceous pustules in different parts of the body. The size of these enlargements on the surface of the body vary, some being larger than others. As I have previously told you, this farcy glands may be combined with simple acute glanders, which was the case in a man who was affected at St. Thomas's Hospital some time since. In such a case, in the course of twenty-six to thirty hours the patient is destroyed.

On examining these tumours after death, they are found to be very deeply seated. The gangrenous integument being removed, a layer of brown glutinous matter is found, under which are a number of small white tubercles, presenting exactly the same appearance as those I described were found in acute true glanders in the frontal sinuses, and are connected either with the periosteum of the bone, or with the fascia enclosing the muscles. If they are situated on the forehead or scalp where there does not exist much muscular fibre, they are connected to the periosteum, but when, on the contrary, they are observed on the limbs where muscle abounds, which is also generally the case, then the fasciæ become their seat.

Both the acute true glanders and the farcy glands may be said to be the same disease; since, if we inoculate an ass or a horse from the matter deposited in the tumours, or the discharge coming from the nostrils, we may have either of these forms of the disease produced. The simple acute glanders may arise either from the matter taken from the farcy lumps; and again, the farcy glands may arise from the discharge taken from the nostrils in simple acute glanders.

Treatment.—With regard to treatment for either of these diseases, at present we know of none. I do not know of a case on record in which veterinarians have succeeded in curing an animal affected with either one or the other form of this disease, when they have partaken of an acute character.

Simple Chronic Glanders.—This is the form of the disease which you have of late had an opportunity of witnessing in my wards. It is confined principally to one nostril. The discharge at first is slight; the patient suffers from no particular pain; and the only inconvenience he complains of is the fetid discharge. There is a constant desire to blow the nose, from the stuffed up sensation which he experiences.

Chronic Farcy Glanders.—Before speaking of the treatment, I will name to you the progress of the other form of the disease. The tumefactions about the face, body, and limbs, gradually form: they are accompanied with aching pains about the body and limbs, and, in the course of time, they suppurate.

With regard to the treatment of the case of chronic glanders, I used the créosote, four

minims of which were mixed by means of mucilage with a pint of water. This I first prescribed for the master, who, finding much benefit from it, gave some to his servant, who suffered from the same disease. This mixture was used as an injection frequently in the day; the discharge decreased, and the offensive odour became quite dissipated. At the time of this man's admission into our hospital, the discharge, though still offensive, was not, he said, so bad as it had been. The master, I should name to you, had taken the créosote internally also, and certainly when I last saw him was much better, though I did not expect he was cured. The man continued the use of the injection after his admission, and in the course of about fourteen days became so far recovered that he thought it needless to stay in any longer. The fetidness of the discharge had entirely disappeared; the secretion was also much less.

Although I do not expect the créosote to cure the disease, yet its effects are so far beneficial as to prevent the inconveniences arising from the affection. Therefore I should certainly strongly recommend veterinarians to have recourse to it in animals, and further ascertain the effects of this remedy in such a disgusting and horrible disease. No one certainly can deny its valuable effects in foul ulcers, and many diseases of the skin; therefore we are warranted in trying it in all affections in which other remedies have been employed without any advantage.

WESTMINSTER HOSPITAL.

Laceration of the Perinæum, Urethra, and Crura Penis.

A man of the name of Henry Morton was admitted on the morning of Sunday, May 24, 1835, into Northumberland Ward, and placed under the care of Mr. White, in consequence of a most singular accident.

It appeared from the account afterwards given of the manner in which it happened, that he got out of bed and used the chamber-pot, standing close to the bedside with his back turned towards it. As soon as he had evacuated the bladder, he attempted to assume the sitting posture, with the double object of placing himself on the edge of the bed and conveying the utensil underneath it. He missed the bed, however, and consequently fell to the ground, just at the very moment he had brought the pot beneath him, and he therefore fell upon it, breaking it into pieces, the broken portions lacerating the perinæum and vicinal parts, and causing tremendous hæmorrhage.

He was forthwith carried to the hospital, where he arrived almost moribund from loss of blood: he was roused by the administration of brandy, &c. Mr. White was sent for, and arrived about nine. At that time, from the low condition to which the man was reduced,

there was not any hæmorrhage, coagula having filled up the external opening of the wound, which was not a very large one.

Mr. White had the unfortunate man placed on Heurteloup's *lit rectangle*, in the position for lithotomy, and then proceeded to examine the wound, which apparently extended to the verge of the anus. On cleaning away the coagula, profuse and continuous hæmorrhage immediately ensued, but its source was concealed, so that Mr. White was obliged to enlarge the opening by free incisions in various directions. By this means injury to a fearful extent was made manifest; the urethra was found to be lacerated from the membranous portion backwards to the bladder; the penis was divided immediately anterior to the bulb, and hanging out, and each crus was lacerated to a very great degree; the finger could be passed up on either side so as to feel the pubis. The rectum and anus were not injured, nor were the scrotum, testes, nor the spermatic cords. The whole extent of lacerated and exposed surface was freely pouring out blood, so much so that the sufferer was evidently greatly exhausted. Various styptics were employed, but unavailingly; ice was applied for a considerable time, but it did not succeed in checking the hæmorrhage. At intervals, as syncope approached, the bleeding diminished, or even ceased, and then hopes were entertained that it was mastered, but as soon as the circulation rallied again, the hæmorrhage returned with redoubled violence. Ligatures were also employed, and the *cura penis* were included within ligatures twisted round the penis, used in the operation for the removal of the hare lip. At first only one pin was passed, and the thread applied round it; but it did not hold, and it was found necessary to pass a second crossways with the first, and then apply the thread: it remained securely. The bleeding was at last arrested by wadding up this enormous cavity with pledgets of lint and sponge, the whole being secured externally by pressure exerted through the medium of Mr. Lynn's prolapsus recti truss, the bulbous portion of the instrument pressing on the part corresponding to the anterior perinæum. Three hours were occupied in the endeavours to arrest the hæmorrhage; and it was remarkable that a fit of coughing occurring during this period, would immediately induce the passage of a large quantity of dark venous blood, leading to the belief that some of the internal hæmorrhoidal veins, and perhaps some of the cluster of veins at the neck of the bladder were wounded. As a necessary consequence of plugging up the wound, the portion of the penis which was divided posterior to the scrotum, and anterior to the bulb, could not be returned: it was, therefore, left external to the wound, with the hope that when all dread of ulterior hæmorrhage should be removed by the establishment of suppuration, it might then be replaced. A gum-elastic catheter was passed from the orifice of the urethra, and

guided through the lacerated perinæum into the bladder. The man was of course greatly exhausted, not only from the immense hæmorrhage, but also from the protracted endeavours to arrest it. Orders were issued that he should be kept perfectly quiet, and that no one should be allowed to disturb him.

He remained much in the same condition until the Tuesday, when the wound was examined. Nature had of course rallied to a certain extent; but there was not the slightest appearance of what might be called re-action. The pulse was small, and not very frequent: the skin cool, tongue foul, countenance pale and dejected. He spoke in a low voice, and slowly, as if it were a great and unwilling effort, and he did not complain of thirst. The bowels had not been opened since the previous Saturday, nor did he feel any desire to pass a stool. The urine dribbles from the instrument when he does not attempt to force it, or when he is free from cough: either of the latter occurrences causes it to pass through the wound.

The prolapsus recti truss was then removed, and he was made clean and comfortable. In order to effect the former object, the hips were raised, and the instrument drawn from under him, and some of the wadding was also taken away; whether it was the exertion of moving him, or the removal of the pressure, cannot be distinctly decided, but hæmorrhage, to the extent of a few ounces, immediately ensued. The wound is suppurating; the discharge being very offensive, the parts were accordingly washed with the chloride of soda solution. He sleeps tolerably well, and says he does not suffer more pain than he has reason to expect. The men in the same ward with him say he is almost always asleep. He has not had any medicine, except a little pectoral mixture to relieve his cough, nor is it thought advisable to give him any aperient. He takes a little tea, light pudding, &c.

He continued in much the same state, nature neither rallying nor becoming more depressed. On the 28th, the bowels not having been opened since his admission, Mr. White ordered him an injection, which did not act, and he had then half an ounce of castor-oil, which procured five or six loose motions in the course of the next day, and he appeared to be more depressed afterwards.

On the morning of Saturday, the 30th of May, hæmorrhage again occurred, but evidently not from any large vessel, not coming *per saltum*, but still to a considerable amount. It was arrested by pressure. When seen at the visit, he was very pale and exhausted; dejection more marked, with a degree of restlessness and irritability not previously present. The house-surgeon reported that the wound was freely suppurating, with a portion of its extent sloughing.

In the course of the evening, tetanic spasm supervened, commencing by trismus, and

afterwards becoming general, which terminated his life the succeeding evening.

On the Monday, an examination was made as to the extent of the wound, but, no notice being given of such intention, we are unable to give the results.

INDIGESTION.

INDIGESTION, with acidity, flatulence, nausea, pain and distension of the stomach, arises from a variety of causes. In some, the fatigue and anxiety annexed to the extensive trades carried on in London, produce disorders of the stomach; in others, irregularity as to the quality or times of their meals; and long fasting has the same effect. Merchants, bankers, and other men of business; also counsellors, attorneys, and medical practitioners of every denomination, at some seasons of the year, take an early breakfast and return to a late dinner, perhaps after suffering much for two or three hours from cold and hunger, and from uneasy sensations of faintness, languor, sinking, &c. When the digestive powers have been thus previously debilitated, the process of digestion, after a hearty meal, is slow and imperfect. Under such circumstances it is not less injurious to eat heartily, and to take strong exercise immediately afterwards, than to load the stomach with dinner, tea, and supper at one sitting, a practice usual among men of business, as well as men of pleasure; likely, if it be long continued, to entail on them diseases to which the class of stomachic medicines, or the salubrious waters of Bath and Cheltenham, will not be able to furnish a certain antidote.

DR. WILLAN.

CAUSE OF HEART-BURN.

THIS complaint of the stomach may arise, not only from acidity, but from any other acrimonious matter irritating the cardiac orifice.

VAN SWIETEN, Tom. II. p. 85.

ROYAL COLLEGE OF SURGEONS.

NAMES of Gentlemen who received Diplomas during the month of May:—

John Audland, Milnthorpe; John Day, Walsal; H. Gilbert Cory, Holsworthy; C. J. M. Spencer, Norwich; C. H. Butler, Ingatstone; Arthur Berryman, Penzance; Edward Groves, Dublin; Thos. Hankins, Feversham; R. G. Flint, Wellsbourne, Warwick; J. D. Alty, Ormskirk; H. Metford, Bath; W. Watson, Grendbrough Fields, Warwicks.; C. Arnold, Grantham; D. Dorning, Manchester; Edw. Baker, Maddington; W. Foley Kilrush, Clare; J. C. Beckett, Ballymoney, Antrim; J. N. Maxwell, Dublin; W. J. Gaye, Shefford; S. Davie, Ipswich; Thomas Lucas, Soham; Geo. Style, Dorchester; Hen. Shaw, Exeter;

Geo. Philipson, North Shields; R. J. Hindes, Granard, Longford; Ed. Baker, Birmingham; Henry Graham, Edgeward Road; H. Perkins, London; James Parker, Tonbridge; James Duncan, Edinburgh; C. Waddell Tewkesbury; J. T. Jenkins, Birmingham; W. H. Dry, Oxford; J. Robinson, Beverley; R. S. Shield, Chester-le-Street; R. W. Budd, Worcester; R. F. Salter, Steyning; S. C. Fairbank, Sidney, N.S.W.; F. Foaker, Kirby, Essex; P. R. Mould, Chatham; R. Bayer, Antigua; G. Davies, Dolgelly; W. Baird, Glasgow; D. Ross, Rossshire; Thos. Cobb, Malton, Yorks.; J. J. Maron, Cheltenham; George Oldham, Morton, Derbyshire; J. A. Kirkpatrick, Clitheroe; C. T. Downing, London; J. S. Webb, Crewkerne; J. Gillies, Westbury; John Dale, Northwich; J. W. Roberts, R.N.; W. Cruickshank, Turiffe, Aberdeens.; R. Stevens, Kennington; C. Johnston, Stepney; W. A. Elston, Bulbrook, Northampton; L. Thomson, Newcastle-upon-Tyne; F. C. Batt, Abergavenny; John Hurdon, Launceston; W. P. Ruddock, Leeds; J. Adam, Cheltenham; E. H. Bolland, Dublin; C. Shaw, Co. Longford; Wm. Batchelour, London; G. Paundall, Alfreton; W. H. O. Sanker, Wingham, Kent; John Moore, Kilbraughts, Co. Antrim; Henry D. Chester, Redruth; J. R. Kirkman, Manchester; H. Thors, Bauksahl, York.; George Inniswood, Carlisle; H. B. Hinton, E.I.; J. Fitzpatrick, Kilworth, Co. Cork; E. F. Crosse, Kington, Herefordshire; T. Edwards, Llansaintffraid, Montgomeryshire; H. D. Jones, Carlisle-street, Soho; J. N. Heathcote, Newcastle, Staffordshire; William Denny, Omagh; William Field, Langdon, Staffordshire; Robert Rivers, Ipswich; John Gaskell, St. Helen's, Lancashire; N. Miskin, Broad-street, Horsleydown; Edwin Fagg, Bedfont, Middlesex; J. Collins, London; E. A. Smith, St. John's, New Brunswick; W. Monkhouse, Penrith, Cumberland; A. H. S. Rennie, Alresford, Hants; H. Hayward, Aylesbury; W. W. Wells, Minehead, Somersetshire; John Gilby, Alford, Lincolnshire; Thomas Laycock, Doncaster; Joseph Humpage, London; Thomas Sweeny, Strand; J. Sutcliffe, Halifax, Yorkshire; G. B. Snow, Lincoln; R. R. Sutcliffe, London; George Leigh, London; W. J. Square, Plymouth; G. D. Phillips, Sheffield; C. R. Vachell, Cardiff; Thomas Wilson, Drummerone, Donegal; G. A. Rees, London; E. Hyde, Witney; F. Le Mesurier, Guernsey; W. P. Jones, Holywell.

APOTHECARIES' HALL.

NAMES of Gentlemen to whom the Court of Examiners granted Certificates of Qualification, May 28th:

Abraham Hely Hutchinson Lattey . London.
Henry Taylor Oxford.
James Morris, late of Bombay.

APPOINTMENTS.

Naval.—Mr. M. Price, surgeon to the Hector convict ship. Mr. John W. Lane, assistant-surgeon of the Challenger, to be acting surgeon on board that ship, v. — Kay, invalided. Mr. John A. Mould, assistant-surgeon to the Spartiate, to the Challenger. Mr. A. Kilroy to be assistant-surgeon of the Edinburgh. Mr. J. G. G. Ballantine, assistant-surgeon of the Victory. Mr. Jas. Steill, assistant surgeon of the President. Mr. L. D. Buchanan, assistant-surgeon of the Pearl. Mr. Robert Fairservice, assistant-surgeon of the Portland. Mr. Alex. Paterson, assistant-surgeon of the Blazer. Mr. Thomas Roger, assistant-surgeon of the Thunderer.

Military.—Surgeon George Alex. Stephenson, from the 89th Foot, to be surgeon of the 3rd Dragoon Guards, v. Peacock, deceased. Staff Assistant-Surgeon William Renny, M.D., assistant-surgeon of the 1st Dragoons, v. Steele, promoted in the 16th Foot. Assistant-Surg. William Steele, from the 1st Dragoons, surgeon of the 16th Foot, vice Shean, appointed to the 89th Foot. Staff Assist.-Surgeon James Murray Drysdale, assistant-surg.-34th Foot, v. Lorimer promoted in the 79th Foot. Staff Assist.-Surgeon William Hamilton, assistant-surgeon of the 43rd Foot. Dr. David Morrice, assistant-surgeon of the 60th Foot. Staff Assist.-Surgeon Alex. M'Grigor, M.D., assistant-surgeon 71st Foot, v. Ferguson, appointed to the Staff. Surgeon Robert Shean, from the 16th Foot, surgeon of the 89th, v. Stephenson, appointed to the 3rd Dragoon Guards. Hospital Staff—To be Assistant-Surgeons to the Forces—Assist.-Surgeon George Ferguson, from the 71st regt., vice Hamilton, appointed to the 43rd Foot. Henry Francis Minster, gent., vice M'Grigor, appointed to the

71st Foot. James Cuthbert Ottaway, gent., vice Drysdale, appointed to the 24th Foot.

General.—Mr. John Carter, senior resident-surgeon of the Birmingham Dispensary. Messrs. Baldey and Long, surgeons to the parish of Brighton. Mr. Francis Sharp, surgeon to the Stranger's Friend Society, in Leeds. Mr. George B. West, surgeon to the County Infirmary, Longford. Dr. Phillips, physician to the Manchester Royal Infirmary, Dispensary, Lunatic Hospital, and Asylum. Dr. Philip Jones, of Denbigh, physician to the Chester Infirmary. Dr. Cumming, consulting-physician to the same charity.

WEEKLY BILL OF MORTALITY.

London, Tuesday, June 2, 1835.

Age and Debility	24	Inflammation of the	
Apoplexy	3	Brain	1
Asthma	4	Inflammation of the	
Childbirth	3	Lungs and Pleura	2
Consumption	55	Inflammation	15
Convulsions	20	Insanity	1
Dentition, or Teeth-		Jaundice	1
ing	1	Measles	10
Diarrhoea	1	Paralysis	6
Dropsy	9	Rheumatism	1
Dropsy on the Brain	8	Small Pox	5
Erysipelas	3	Stricture	1
Fever	4	Thrush	3
Fever, Scarlet	5	Tumour	2
Heart, Diseased	3	Worms	1
Hooping-Cough	8	Unknown Causes	10
Inflammation of the			
Bowels & Stomach	1	Stillborn	13

Buried, Males 118 Females 110 Total 228

Decrease in Burials reported this week, 162.

METEOROLOGICAL JOURNAL FOR MAY.

Days of Month.	Moon.	Thermom.		Barometer.		De Lue's Hygrometer.		Winds.		Atmospheric Variations			
1		46	52	45	29.23	29.42	63	66	N.N.E.	S.W.	Rain	Fine	Fine
2		48	48	35	29.37	29.39	64	65	S.S.W.	W.S.W.	Cloudy	Showry.	—
3		36	57	47	29.36	29.39	65	65	W.S.W.	S.W.	Fine	Fine	Rain
4		51	59	46	29.61	29.73	66	50	W.	S.S.W.	—	—	Fine
5		55	57	50	29.80	29.86	50	52	S.S.W.	S.	Cloudy	Cloudy	—
6	F	52	61	48	29.86	29.80	51	52	S.S.W.	S.	—	Fine	—
7	Q	57	60	50	29.67	29.70	52	52	W.	S.S.W.	Fine	—	—
8		56	63	56	29.80	29.81	53	55	S.W.	S.W.	—	—	—
9		61	63	52	29.73	29.66	53	50	S.S.W.	S.W.	—	—	Cloudy
10		60	61	48	29.52	29.52	51	49	S.W.	S.W.	Cloudy	Showry.	—
11		57	61	49	29.70	29.64	48	50	W.S.W.	S.W.	—	Fine	—
12		44	59	44	29.57	29.57	50	58	S.S.W.	S.E.	Fine	—	Fine
13	FM	52	54	45	29.31	29.31	58	60	S.S.E.	S.E.	—	Rain	Rain
14		47	50	45	29.33	29.34	60	70	E.S.E.	N.N.E.	Rain	—	—
15		49	53	48	29.45	29.46	70	62	N.E.	S.	—	—	Fine
16		54	60	53	29.50	29.67	62	58	S.S.W.	S.S.W.	Fine	Fine	—
17		62	67	49	29.67	29.67	50	47	S.S.E.	S.	—	—	—
18		65	70	57	29.63	29.64	46	47	S.E.	E.	—	—	—
19	L	63	67	54	29.62	29.60	45	49	E.	E.	—	—	—
20	Q	56	61	50	29.66	29.65	49	50	E.	E.	Cloudy	Cloudy	Cloudy
21		59	69	50	29.94	29.72	52	51	N.N.E.	N.E.	Fine	Fine	—
22		48	51	43	29.54	29.16	51	50	N.E.	E.S.E.	—	Rain	—
23		44	59	44	29.06	29.46	50	53	S.E.	S.	Rain	—	—
24		52	63	49	29.45	29.23	53	60	S.S.W.	S.W.	Fine	Cloudy	—
25		51	59	43	29.40	29.52	60	62	N.W.	N.N.W.	—	—	—
26		48	52	40	29.60	29.23	62	58	S.S.W.	S.S.W.	—	—	—
27	NM	47	69	52	29.28	29.30	58	50	W.S.W.	S.W.	Cloudy	—	—
28		59	59	44	29.52	29.50	59	50	W.S.W.	S.E.	—	—	—
29		57	58	52	29.64	29.85	50	50	N.N.E.	N.N.W.	—	—	—
30		53	57	51	29.83	29.80	48	41	W.S.W.	W.N.W.	Fine	Fine	—
31		56	58	48	29.75	29.82	45	46	W.	W.	—	—	—

The quantity of rain fallen in May was one inch 78-100ths.

50, High Holborn.

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CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At the Meath Hospital during the Session of
1834-5.*

LECTURE XV.

Case of Phlebitis—Remarks on the Symptoms and Treatment of this Disease—Pathology of Phlegmasia Dolens—its Treatment—Case of Cancrum Oris—Fatal Termination—Remedies employed—Case of Ague Cake—Observations on the different varieties of Ague—True Ague, or Intermittent Fever—Ague produced by Inflammation of Internal Organs—Nervous Ague—Hysterical Ague—Treatment of Ague Cake.

GENTLEMEN,—Among the cases at present under treatment in our wards, that of Mary M'Quade particularly demands your attention. This poor woman was admitted a few days since labouring under an attack of fever accompanied by considerable prostration, anxiety, and restlessness; in addition to these symptoms, she has a local affection of a very important nature; the right leg, as far as the knee, is swelled to twice its natural size, and a large erysipelatous blotch occupies the fore part of the foot, extending over the ankles on each side. The thigh also is increased in size as far as its upper third, so that the tumefaction embraces more than two-thirds of the whole extremity. There is a considerable degree of tension present, and the limb, particularly along the internal surface of the leg, is extremely tender, the soreness being so great over the course of the veins and lymphatics, that she could not bear the slightest touch.

Here we had a swelling of the lower extremity depending on an inflammatory condition of the part, and the question is, in what tissue did it commence, and what are its characteristic features? Before we discuss this question, it may be proper to observe here, that the disease had its origin from cold. When a patient is exposed to cold under unfavourable circumstances, local inflammation is gene-

rally the consequence, and it depends on a variety of causes of what description the inflammation will be, and on what particular part it will fall. Where the lower extremities are the parts chiefly exposed, inflammation of the cellular membrane of the leg is apt to ensue, or it may attack the veins, as in the case before us, constituting phlebitis, or the lymphatics may be primarily and almost exclusively engaged. In a few cases inflammation attacks the arteries of the limb, as in a case which has been published by Dr. Stokes and myself in the Dublin Hospital Reports, where a person, after exposure of the lower extremities to cold, got an attack of arteritis terminating in mortification of the limb and death. Exposure of the lower extremities to cold gives rise to phlebitis much oftener than to arteritis. Dr. Stokes and I have published a striking case where inflammation of the veins of the leg was produced by this cause. You will find this case referred to by Dr. Læe in the excellent article *Phlegmasia Dolens*, in the Cyclopædia of Practical Medicine. You perceive, then, that painful swelling of the lower extremities originating in cold may consist either in the whole cellular membrane being engaged, or it may arise from inflammation of the lymphatics of the veins, or of the arteries. Now when inflammation attacks in the first instance the subcutaneous tissue of the lower extremities, it frequently in its progress involves the lymphatic and venous tissues, the arterial very seldom, for the arteries lie deep, and have no connexion with the subcutaneous cellular membrane. There is, however, nothing more common than that inflammation commencing in this way should terminate in phlebitis and disease of the lymphatics. This appears to be the nature of phlegmasia dolens, that peculiar inflammation which generally attacks one, and seldom both, of the lower extremities, which is most commonly observed in females, and which is characterised by swelling not pitting on pressure, by excessive cutaneous tenderness, and by a remarkable whiteness of the skin of the affected limb, accompanied by increased heat, and more or less lesion of the locomotive function. These are the principal symptoms which characterise

phlegmasia dolens. The inflammatory condition of the limb causes an exudation of fluid into the cellular membrane, consisting partly of serum and partly of lymph; this produces swelling which is of a firm and rather unyielding character, not pitting on pressure like that which results from anasarca. After some time the inflammation extends to the neighbouring tissues, and attacks the veins and lymphatics, a circumstance which has led many persons, among others Dr. Lee, to believe, that phlegmasia dolens arises primarily from phlebitis. This, however, is not borne out by the fact, nor is it true that it consists in inflammation of the lymphatics, as others have suggested; it may engage both the lymphatic and venous tissues, but it differs in many points from pure phlebitis, or true inflammation of the lymphatics.

In the case before us, it would appear that the inflammation commenced primarily in the veins, and by a careful examination you will be able to discover some essential points of difference between the disease and phlegmasia dolens. There is a good deal of soreness present in this case, but the exquisite neuralgic tenderness of phlegmasia dolens is wanting. Again, the shining appearance of phlegmasia dolens is absent, and the colour differs greatly from the dead whiteness observed in that disease. The tenderness also is here more localised, being chiefly complained of on the inside of the limb, and along the course of the veins and lymphatics. On the other hand, it may be observed that these affections have many symptoms in common, and you may have remarked that here, as in phlegmasia dolens, the locomotive power of the limb is considerably diminished. This, however, has been remedied to a certain extent by the curative means employed, and the patient is now able to raise up the whole limb, and bend the leg on the thigh. Now, whence arises this loss of power so often witnessed in cases of phlegmasia dolens, and phlebitis, and inflammation of the subcutaneous cellular tissue of the lower extremities? I am inclined to think it depends on a morbid impression made on the ultimate ramifications of the sentient nerves, which is propagated along the larger trunk to the spinal cord, and from thence by a reflex course is brought to bear and react on the muscular nerves of the limb. In my remarks on paraplegia, I have spoken of this matter at large, and given several instances of loss of power in a limb, produced by impressions made on the extremities of its cutaneous nerves; and such appears to be the lesion of the locomotive power observed so frequently in cases of phlebitis and phlegmasia dolens. In many cases of paralysis, we find the first stage of the disease attended with an increased sensibility of the nerves of the part affected, tending to show that the primary source of the disease consists in an impression made on the sentient extremities of the nerves; and there is nothing more common in such cases than to find the

loss of motor power accompanied by deranged sensation. In phlegmasia dolens and phlebitis, we have great cutaneous tenderness, and this is very rapidly followed by more or less diminution of the muscular power of the limb.

I shall now refer briefly to the curative means employed in this case, observing that it has this in common with many cases of phlegmasia dolens, viz., the inflammation has engaged in succession the cellular membrane, veins, and lymphatics. When the lymphatics are attacked with inflammation, they become swelled and have a knotty cord-like feel, and this condition is most commonly attended with the appearance of erysipelatous patches on various parts of the limb, over the place where a number of lymphatics are simultaneously engaged. This appears to be the case in the present instance, and it explains the occurrence of the erysipelatous blush which covers the instep and ankle. I need not tell you that the appearance of erysipelas over any part of a limb so circumstanced, strongly demands our attention, as it might be an indication of the seat of an injury which may have given rise to the disease. In this case, however, it was the product of the disease, and had no connexion with its origin. The treatment of a case of this description cannot be conducted on strict antiphlogistic principles. The fever which accompanies venous inflammation is of a low typhoidal character, and prostration sets in at a very early period. The intimate connexion of the venous system with the whole economy, the peculiar character of the inflammation affecting venous tissue, and the rapid prostration of strength which ensues, are all circumstances which contra-indicate general depletion. On the other hand, the best effects have been obtained by active local bleeding, and this appears to be so much the more necessary in cases of phlebitis, as the inflammation is apt to run very quickly into the suppurative stage. I therefore ordered forty leeches to be applied along the inside of the affected limb, directing the nurse to encourage the bleeding by warm fomentations. In addition to this, two ounces of mercurial ointment, combined with two drachms of the extract of belladonna, were spread on large pieces of lint and applied over the limb after the leech bites had ceased to bleed. That mercurial ointment thus applied has a tendency to subdue inflammation of a low erysipelatous character, has been shown by Mr. McDowel in an excellent paper published in a late number of the *Dublin Medical and Chemical Journal*. To this we added the extract of belladonna, because the local inflammation was attended with hyper-sensibility of the limb, a condition over which belladonna is known to possess a remarkable influence. Dr. Lee, I should observe, does not appear aware of the great utility of narcotics in the painful swelling of the extremities after fever, or in true phlegmasia dolens. In both these diseases, together with active local depletion by means of the frequent application of

leeches, we should employ anodyne ointments, and above all large doses of opium internally. Some patients in phlegmasia dolens, if the bowels be regulated, will bear and derive benefit from four, five, or even six grains of opium in the day; I speak of the second stage of the disease. The same observation applies with regard to wine, and to sulphate of quinine. It is obvious that phlegmasia dolens consists of something besides mere inflammation; the pain is altogether different from that attending ordinary phlegmasia; it more resembles a general neuralgia of the extremities of the subcutaneous nerves. The internal treatment consisted in giving a few grains of hydrarg. cum creta three times a day, to keep up a free state of the bowels, and with the view of gently affecting the system. These means are very likely to be attended with success. The woman at present is much better, and the inflammation is sensibly declining. I shall not, however, anticipate the result, and for the present shall only call your attention to the case.*

You may perhaps ask me to account for the great tumefaction of the limb observed in this case. It has been supposed by some persons that the whole swelling depends on the obstruction of the veins; but if inflammation was entirely limited to the veins, the swelling could not be so extensive. It is true that if you produce artificial obstruction of any of the great veins by placing a ligature on it, you cause for the time very considerable œdema of the limb. The obstruction to the passage of blood through an inflamed vein will necessarily give rise to a certain degree of swelling, but I am inclined to think that this is not the only source of the tumefaction; it would appear that in addition to phlebitis we have the inflammatory process communicated to the neighbouring parts; the cellular tissue and probably the lymphatics become engaged, there is a copious effusion of serum and lymph, and to this the general increase in size of the limb is to be chiefly attributed.

With respect to the termination of phlebitis, I may remark that it generally ends in adhesion of the sides of the vein and obliteration of its cavity, so that when the patient recovers, the affected vein feels like a piece of whip-cord lying under the skin. We had some patients here who had obliteration of this kind, and in one of them who died afterwards of fever, I found some of the smaller sub-cutaneous veins had become totally impervious through their whole extent, and resembled hard cords. This is all I have at present to say with respect to phlebitis, observing that the diseases which are most analogous to it are phlegmasia dolens, and a particular morbid enlargement of the lower extremity, which has been described by Dr. Tweedie, and by Dr. Stokes and myself in the Meath Hospital Reports.

A child about four or five years old, who has been for some time in the Fever Ward, has been recently attacked with a very formidable disease, cancrum oris. Like most pa-

tients labouring under this malady, she had been previously debilitated by the occurrence of fever, for a child in good health seldom, indeed I may say never, gets an attack of this kind. A preceding febrile condition of the system, and a depraved habit of body, must have existed in every case where cancrum oris occurs. The disease itself is nothing more than mere local inflammation setting in under unfavourable circumstances, and during a morbid state of the system, and hence the local inflammation rapidly assumes the gangrenous character. In children, many forms of general disease are apt to bring on a state of the system in which inflammation of any part has a strong tendency to run into gangrene, and this is to be borne in mind with reference to the present case, for cancrum oris has nothing peculiar in it except its situation.

It is not my intention at present to enter into any particular description of this disease, it has been well described by many surgical writers, and you will find a very valuable essay on the subject published by Dr. Cuming in the fifth volume of the Dublin Hospital Reports. There is also a very excellent article on Cancrum Oris in the London Cyclopaedia of Practical Medicine, to which I beg leave to refer you. It may, however, be necessary to allude briefly to some points connected with its treatment. In the first place, I may observe, with reference to the general principles of treatment, that you should not be misled by the name of the disease, or think that because there is a gangrenous condition present, you should rely exclusively on detergent and antiseptic remedies. This is a common but pernicious error,—it is the error of prescribing for names and not diseases, the easy but dangerous practice of unreflecting empiricism, by which the reputation of medicine has been so often damaged. He who commences the treatment of cancrum oris with the internal and external use of antiseptics is acting on false principles; his practice may have the sanction of time, but it has not the support of observation and experience. In the early stage of the disease, when the cheek is of a deep-red colour, tense, prominent, and shining, I do not know of any means which tend so directly to diminish the amount of inflammation, and check the progress of gangrene, as the application of leeches, few in number, but frequently repeated. This is the mode of treatment which I have found to be most effectual, and which, from my experience of the disease, I can recommend as the most likely to prove beneficial, when, unfortunately, the ordinary resources of medicine are too often ineffectual.

With respect to internal remedies, Dr. Cuming lays great stress on the utility and value of purgative medicines. They may be certainly necessary, and as the little patients very often swallow the sanious discharge from the ulcer, more or less derangement of the intestinal canal must accompany the disease.

But along with purgatives I would strongly recommend the use of sulphate of quinine, either in the form of enema, or, if the child can be got to swallow it, made up into a syrup, and its solution favoured by the addition of a little sulphuric acid. With regard to the external applications, you have a choice of many remedies, each of which you will find recommended by authors, but none of which can be exclusively relied on in any case. The balsam of Peru with castor oil forms a good application, or you may blend it with honey, as we did in this case, one ounce of the balsam to two ounces of honey. You may also employ washes composed of solutions of nitric or muriatic acids, or of the chlorides of soda or lime.

In the present instance the sore has, in spite of all our efforts, eat its way from the internal to the external surface of the cheek. On Saturday, the centre of the cheek was characterised by the appearance of a blueish-black spot, indicating the occurrence of sphacelus. In the meantime it was curious to observe how little constitutional disturbance was yet produced; the child, notwithstanding the manifest existence of extensive sphacelation of the cheek, continued for several days to have a tolerable appetite, and to sleep well, being nearly free from fever, and complaining but little; as the mortification progressed, destroying rapidly the external parts of the cheek, &c. matters soon altered, and the poor little patient sunk exhausted and suffering.

Let me now direct your attention to the case of a sailor who has recently been discharged. This boy was one of the crew of a vessel which returned lately from the West Indies, and was exposed to great hardship during his voyage. Boys in his situation suffer an enormous quantity of fatigue and rough treatment, they are the drudges of all on board, and it is impossible to conceive what privations they endure. When the vessels arrive in unhealthy climates they are generally the first who fall victims to the prevailing malady, and such was the case of this lad, who got yellow fever immediately after his arrival at the West Indies. From this he recovered, but on his way home was attacked with irregular intermittent, which lasted for a considerable time. He had no treatment, and the disease subsided spontaneously, leaving him extremely weak and emaciated. He was, however, obliged to work as usual on his passage, and he arrived in Dublin about three weeks since, debilitated, thin, and with a countenance expressive of long-continued suffering. He had on his admission that peculiar hue of skin which often follows tedious intermittents, and which those who have once seen will always recognise with facility. This colour is to be distinguished from the hue of slight jaundice—it is what has been termed a clay colour. In the present instance it was mixed with a faint tinge of jaundice, and on examining the stools we found that they contained scarcely any bile. He had no fever;

his pulse was rather slow and regular; he complained of lassitude; his urine was deeply tinged with bile; and his belly tumefied. On examining him, we found that the abdominal tumefaction did not depend on the presence of fluid in the peritoneum: it was produced by enlargement of the liver and spleen, intestinal congestion, and tympanitis.

Here, gentlemen, was a case of what has been vulgarly termed ague-cake; that species of congestion and enlargement of the liver and spleen which is apt to accompany the paroxysms of an intermittent, and in some cases to remain after the disease has subsided. You are aware that some persons, during the paroxysm of an intermittent, will complain of pain in the right hypochondrium, but more frequently in the left, and on examination the liver or spleen is found increased in size. If you take the trouble of reading the experiments which have been made with the view of illustrating the functions of the liver and spleen, you will have a good idea of the facility with which enlargement of these organs, but particularly of the latter, may take place. The spleen undergoes very remarkable changes, even in its natural state during the process of digestion, and there is a great difference between its size when an animal is fasting, and its size when an animal has taken food. Indeed it is surprising how rapidly it will become filled with blood, and how quick the transition is from a state of collapse to a state of congestion. It is easy, therefore, to conceive how the spleen may, during the paroxysm of an intermittent, particularly in the cold or congestive stage, become manifestly enlarged. The increase of size, however, never occurs to such an extent in the liver; unlike the spleen, its magnitude remains nearly the same, and its volume does not vary like that of the spleen with the time of day or the period of digestion. It is obvious, therefore, *à priori*, that the spleen should be more frequently the seat of congestion than the liver, and that its enlargement should be more distinct and palpable. But it is not in the liver or spleen alone that congestion occurs during an aguish paroxysm, it may take place in any organ; and this, in a practical point of view, is worthy of being borne in mind. Thus in a case which I attended, the patient got intermittent of a tertian type; during each paroxysm he had some distress about the chest and slight cough, but these symptoms disappeared during the intervals. As the disease, however, went on, the fits of coughing and dyspnoea increased, and the sulphate of quinine failed in arresting the paroxysms. The pulmonary congestion became gradually more marked and permanent, and no longer disappeared during the intervals; finally, inflammation of the lung took place, and the patient died with extensive hepatisation. This happened about twelve years ago, when the old notion of connecting the cold stage of ague with debility was universally prevalent, and before the practice of

bleeding for the relief of visceral engorgement had been introduced. Subsequently the practice of bleeding in the cold stage, as introduced by Dr. McIntosh, was tried on an extensive scale in the Meath Hospital, and it is a practice which I can strongly recommend in those cases where there is recurring inflammation of some internal organ. It is not a mode of treatment applicable to all cases, and in mild cases unaccompanied by excessive congestion of any viscus, it is totally unnecessary; but where an important organ is threatened, it is a valuable remedy, and has on some occasions cut short the paroxysms altogether, or rendered them much milder and more manageable.

Sometimes ague is accompanied by symptoms of congestion and inflammation of some internal organ during the paroxysms, and yet by giving sulphate of quinine you will succeed in arresting the intermittent and the visceral disease at the same time. I recollect the case of a boy who was under treatment here for ague, and who during the paroxysms had severe bronchitis with dyspnoea. The cough did not leave him even during the intervals, but it was much milder; I was, however, doubtful whether the case would admit of the exhibition of sulphate of quinine, from the violence of the pulmonary symptoms during the fits. I determined after some time to try the quinine, and I found that it stopped both the intermittent and the bronchitis. It is to be observed, however, that in this case the bronchitis was of a chronic character, and I believe that in all cases of ague accompanied by visceral derangement, where quinine succeeds in curing the disease, the inflammation is either of a trifling description or is one of a chronic nature. Where the visceral derangement is great, quinine will not succeed, and hence it is of great importance in the treatment of ague, that you should carefully attend to the state of the internal organs.

There are several forms of disease which simulate intermittent in a very remarkable manner, and as this may lead to very dangerous errors, it is necessary on all occasions to make a strict inquiry into the origin and history of the complaint. Some forms of hectic assume the intermittent character, and have been frequently mistaken for ordinary ague. Of this I had lately a very striking instance in the case of a lady, who came from the county of Limerick to consult me for what was stated to be an attack of irregular intermittent. She had been confined in August, had been feverish after her accouchement, the consequence, she believed, of exposure to cold, and got a slight cough. This continued, but without any expectoration, for two or three weeks, and then she was attacked with fever of an intermittent character, and exhibiting a well marked tertian type. She began to take quinine, but this aggravated the cough very much without having any effect on the paroxysms. Various other

remedies were also tried, but their only effect was to render the paroxysms more frequent and irregular. The moment I saw her I was convinced that she was labouring under some visceral disease. I examined her chest, and found dulness under the right clavicle with tubercular crepitus. Her cough had been dry until she came to Dublin, but now it became suddenly moist, and a distinct gurgillement could be heard. The apparent intermittent was nothing more than phthisical hectic, and Dr. Stokes, who was also called in, came to the same conclusion. I recollect having observed something of the same kind in a case which I attended some time ago with Dr. Marsh. The patient had well marked intermittent, and we treated him for it; but the sulphate of quinine, and the other remedies which we employed, had only the effect of converting the fever into remittent. On a sudden the gentleman, without having made any complaint of pain in the side or any thing indicative of derangement of the liver, became suddenly jaundiced, and sank rapidly. On dissection, we found seventeen or eighteen small circumscribed abscesses in the substance of the liver. The intermittent hectic here depended on interstitial inflammation of the liver, a disease which is generally of a latent and incurable character.

I need not refer here to certain forms of fever which accompany disease of the brain and of the urinary system, and which are remarkable for their intermittent character. There is, however, one form of anomalous intermittent, of which it may be necessary to say something; I allude to that species of ague which seems to be exclusively confined to females of a nervous habit, at least I have never met with it in any others. Persons of this description, after an accouchement or some acute disease, or in consequence of violent mental emotions, will sometimes get into a peculiar state of health, in which they are liable to recurring periodic attacks of fever. Some time since, Dr. Stokes called me to see a lady, who shortly after her confinement had got an attack of well marked tertian. She had, at the regular time, severe rigors, followed by acceleration of pulse, heat of skin, and profuse sweating. When the paroxysm was over, she felt tolerably well, but still there was much excitement of pulse, and the intermissions were anything but perfect. Sulphate of quinine had been tried by the accoucheur in attendance, but had failed. On examining the case, I found that the lady was of a decidedly nervous and hysteric habit, and advised the use of nervous and antispasmodic medicines. A mixture, containing musk, camphor, and ammoniated tincture of valerian, was prescribed, and the intermittent symptoms rapidly disappeared.

But to return to the case of this boy.—How are we to treat this ague-cake? The disease has not as yet proceeded so far as to produce ascites, but if permitted to run on it would

soon cause effusion into the peritoneal cavity. In a case of this kind a great deal will depend on whether there is any fever present or not. If there is no remarkable excitement of pulse or heat of skin, general antiphlogistic means will be unnecessary, for any local tenderness or irritation can be relieved by local bleeding. In the case before us, there was a slight degree of tenderness, and we applied leeches once with benefit. But we did not apply them over the abdomen; they were applied to the anus, because it is well known that leeches applied in this situation have a remarkably good effect in removing intestinal congestion, and consequently in relieving hepatic engorgement. Those who have remarked the relief which a flow of blood from piles gives in cases of hepatic engorgement with dyspepsia, will recognise the value of depletion of this kind, and will imitate the natural mode of relief by art. Hence the use of leeches applied to the anus in cases of intestinal congestion, and hepatic or splenic engorgement. There is no necessity here for applying a great number of leeches, three or four every second day will be quite sufficient, and we have found this number answer every necessary purpose. In addition to local bleeding and attention to diet, I ordered this lad to take a few grains of blue pill once a day, not with the intention of affecting his system, but merely with the view of keeping up the free action of the bowels. I continued the mercury only as long as the tenderness of the liver remained, for experience has shown that in those cases of ague cake, where there is merely enlargement of the liver without tenderness, mercury is a bad remedy.

In cases of this kind, where the stage of active congestion is past, where there is no fever, where the tenderness is removed, and nothing but the increased size of the liver remains, how are you to accomplish a cure?—first, by inserting one or two setons over the liver; and, secondly, by the use of iodine and tonics. The use of setons in cases of this description is well known, and needs no comment. I recollect the case of a lady, who after several attacks of jaundice got chronic enlargement of the liver. The right lobe of the liver, which was the portion chiefly affected, extended down towards the crest of the ilium, and was excessively indurated. This state had occurred after the patient had used mercury and been copiously salivated. Two setons were inserted over the region of the liver, and these produced rapid diminution of the enlargement and a perfect cure.

With respect to tonics, I may observe that they prove extremely useful in chronic enlargements of the liver and spleen. We are in the habit of using in this hospital a combination somewhat similar to the celebrated Bengal spleen powder; it consists of vegetable and mineral tonics, combined with a vegetable purgative, as, for instance, aloes, and we have seen the best results from its use. With re-

spect to iodine, it is a valuable adjuvant in such cases, particularly where the system has been much deranged, and where mercury would be likely to run down the patient. Here iodine gives vigour to the constitution, and tends in a very remarkable manner to promote the absorption of the morbid products, on which the enlargement chiefly depends.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCUCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXV.

Puerperal Convulsions.

GENTLEMEN—The subject which is to occupy your attention to-day is that of *Puerperal Convulsions*. This formidable disease may not only attack women in the latter months of pregnancy, and during labour, but also those who have been just delivered. It is a clonic spasm which affects all the voluntary muscles, producing sometimes even opisthotonos and emprosthotonos, and accompanied with a perfect loss of consciousness. Dr. Dewees, who has given an admirable article on this subject in his *Compendious System of Midwifery*, has divided puerperal convulsion into three species, the *epileptic*, the *apoplectic*, and the *hysterical* convulsions, a division which is of great practical importance and utility, and which I shall follow on the present occasion. Of these the epileptic first and foremost claim our attention, not only because they are the most frequent in occurrence, but because, properly speaking, they may be looked upon as the only genuine form of puerperal convulsion, being entirely peculiar to this state, while those of the apoplectic and hysteric species frequently occur, independent of pregnancy. The epileptic puerperal convulsions are as peculiar to the pregnant and puerperal state as the convulsions of children are to the period of dentition, and are distinctly referable to the same genus of Dr. Cullen, viz. the *epilepsia occasionalis*, or epilepsy arising from manifest irritation, and ceasing upon the removal of it. Nor can I agree with an author of acknowledged merit, I mean Mr. Burns, "that they differ from epilepsy in not arising from some organic affection of the brain, or direct irritation of that organ, but from some sympathetic or temporary cause," for I am completely supported in this opinion by the high authority of Dr. Cullen.

Epileptic puerperal convulsions may be divided into two very distinct species, requiring treatment as opposite as the causes are different; first, they may be convulsions

arising from the irritation produced by the presence of the child in the uterus or passages, or by a state of irritation thus produced continuing after delivery. Secondly, they may be convulsions arising from causes producing debility or collapse in the energy of the brain and nervous system, as hæmorrhage or other profuse evacuations, depressing emotions of the mind, terror, intense pain, &c.

Epileptic puerperal convulsions of the first species, being the result of irritation indirectly applied to the brain, are uniformly attended with symptoms of strong determination of blood to the head. Hence, for some days previous to an attack, the patient suffers from severe pain and throbbing of the head, tinnitus aurium, temporary loss of vision, vertigo, and towards night sometimes even delirium. This pain, which usually attacks the *back* part of the head with most violence, is generally preceded by an oppressive pain in the region of the præcordia, which ceases upon the accession of the headach. It will be well worth your while, gentlemen, to watch the different effects which are produced by different degrees of impetus of blood to the brain, among the cases which you occasionally meet with in the wards of the hospital, for they are not only curious, but are of great importance in a practical point of view. With a slight degree of determination to the head, you have head-ache; as it increases, the pain of head disappears in proportion as delirium makes its appearance; with a further degree of cerebral congestion epilepsy may come on, and this may be followed or preceded by coma. In this condition, if the patient be largely bled, the convulsions will cease, probably leaving her in a state of stertorous coma: diminish the congestion still further by a repetition of the bleeding, purgatives, &c., the coma will go off, but delirium returns, and, by still further reduction of the impetus of the circulation to the brain, this state will be removed, the patient returns to consciousness, with intense headach, which in its turn gradually subsides also. But I am digressing somewhat, and must return to my subject. You will find some admirable observations on the effects of impetus to the brain in the 1st vol. of Dr. Parry's Posthumous Works, which I advise you to read with attention. I was saying, gentlemen, that the first species of epileptic puerperal convulsions, being the result of irritation indirectly applied to the brain, are almost always preceded by marked evidences of violent cerebral congestion, and that in these cases the pain is mostly at the back of the head, arising probably from this being the situation of the largest cerebral sinuses. In such cases, where we have the various premonitory symptoms which I mentioned, a timely bleeding, followed by smart purging and abstemious diet, will be of great service, for, by thus anticipating, as it were, Dr. Dewees feels assured that in a number of instances he has prevented an accession of this terrible disease. Sometimes, however,

without giving any of these premonitory symptoms as a warning, the convulsions burst out at once, without the least previous notice.

They mostly begin in the face, causing frightful contortions. The face and eyes are twitched about in all directions, the face becomes swollen and livid, the eyes prominent, and the iris rapidly convulsed, with alternate contractions and dilatations. Passing into the neck, a state of trismus is produced, by which the tongue is not unfrequently caught between the teeth, and severely wounded. The neck is pulled on one side, and the trachea being compressed, severe dyspnœa is produced. The respiration is nearly suspended, and from the violent rushing of the air as it is forced through the contracted rima glottidis, the breathing is performed with a peculiar hissing wheezing sound. The muscles of the chest now in their turn become affected, and the thorax is convulsively heaved and depressed with great vehemence. Those of the abdomen succeed in the storm of convulsive action, and the spasmodic exertions are here, if possible, still more violent. Such are the contractions of the abdominal muscles, and so violently do they compress the contents of the abdomen, that a person who had not previously seen the patient, would scarcely believe she was pregnant. The next moment the abdomen is as much distended as it was before compressed, the urine and fæces are sometimes discharged involuntarily, the extremities become violently convulsed, and the patient is bedewed with a cold clammy sweat. This is the common course which an attack of puerperal epilepsy takes. Dr. Dewees's description, from which I have partly taken the one I have now given you, is excellent, and I advise you to read his whole chapter on this subject.

These convulsions generally last for three or four minutes, and then gradually subside; the oppression in the breathing abates; the face becomes less livid and swollen, and they are succeeded by a species of stertorous sleep from which, in about a quarter of an hour, the patient suddenly awakes, quite unconscious of what has passed, and feels sore, and, as it were, bruised all over her body, more especially if the attendants, through a mistaken notion of kindness, have attempted to restrain her movements during the fit. She feels very tired, and usually complains of pain and smarting in the tongue, which will be found to have been wounded by the teeth, and expresses much surprise, on wiping her mouth, to find the handkerchief covered with bloody froth and saliva. She may suffer but one attack, and have no return of the fit, or in half an hour, an hour, or longer, the convulsions will again appear as at first; and if this happen for several times, she does not recover her consciousness in the intervals. The result of these attacks varies exceedingly: in some cases the first fit may prove fatal, while in others the patient may lie from twelve to twenty-four hours in strong convulsions, and

yet recover. The disease itself is not to be distinguished from common epilepsy; the only difference is that the one is an acute, and the other a chronic affection.

Females pregnant at a very early age are peculiarly liable to convulsions, spasmodic vomiting, &c. "I have not unfrequently observed them," says Professor Naegelé, "in young women who had been brought up in the country, and were married to a husband living in town, who, from an active life in the open air, were not only debarred their accustomed exercise, but compelled to live in the impure atmosphere of a confined street." They attack young women pregnant with their first child much more frequently than those more advanced in years, or who have already had several children. Females of this early age and delicate habit of body, are liable to a variety of spasmodic affections, which must be considered as so many modifications of convulsions. "I have seen," says Mr. Burns, "severe cases arising from menstrual irritation, with coma and delirium, in the interval, accompanied with severe pain in the hypogastric region: excessive rigors are a species of it." This last is a harmless modification, which is constantly observed during labour, at the moment that the os uteri has attained its full degree of dilatation, or immediately following the expulsion of the child, and may be easily distinguished from rigors produced by cold, because the application of warmth will have no effect in removing them. Moreover, the patient herself will frequently express her surprise that she should shiver thus violently, and yet at the same time not feel at all cold.

All the premonitory signs of these convulsions being so many symptoms of determination to the head, the most powerful means of cure will naturally be a copious bleeding from a large orifice in the arm. This has been practised with great success by the French, and, *per eminentiam*, by the English practitioners, who, in some cases, have almost carried this treatment too far: nor have the Germans been behind hand. "In puerperal convulsions," says Carus, "where the face is red, the pulse hard, &c., venesection is the first remedy to be used, then cold applications to the head, flannels wrung out of hot decoction of mustard, or sinapisms to the calves of the leg; blisters to the nape of the neck, stimulating injections, and strong doses of calomel and nitre."

After bleeding, as the convulsions are frequently connected with a neglected state of bowels, a smart cathartic injection will be of great service, and not unfrequently seems to produce more relief to the sufferer than even a copious venesection. It is unfortunate; but in these cases we seldom have much chance of giving anything by the mouth; where it is possible, I prefer giving a smart dose of calomel and jalap, to the combination with nitre, as recommended by Carus, and gene-

rally follow this up with repeated doses of salts and senna. The crown of the head should be shaved; and, more especially in private practice, it will be advisable to leave the front bands of the patient's hair, as the total loss of this natural ornament is far from necessary, and is not unfrequently a source of considerable annoyance for some time after. She should be propped up by pillows nearly into a sitting posture, and a bladder half filled with pounded ice applied to the shaven scalp: this need not be changed often, for the ice will preserve its solid state for some hours, owing to the quantity of latent heat which is required to convert it from the solid to the fluid state. I am not a great friend to blisters applied to the nape of the neck, for, owing to the constant motion of the patient, they seldom stick there long, and sometimes, from slipping about over the shoulders, I have seen almost the whole upper half of the back covered with vesications. Sinapisms to the calves of the legs and soles of the feet are more important. Blisters applied to the scalp itself are I think decidedly injurious in many cases, from their tendency to increase the determination to the head. The room should be kept as cool and quiet as possible, and no person allowed to be present who is not absolutely necessary. Attention should be also paid to the bladder, for a distended state of this organ will easily produce sufficient irritation to keep up the convulsions. "If these means fail," says Carus, "if the pregnancy be considerably advanced, and a return of the convulsions be threatened, artificial delivery becomes necessary." Guillemeau, so early as 1598, proposed to turn in convulsions and hæmorrhages, and thus save the mother and child. Mr. Burns, who advocates the same practice, qualifies the rule considerably. "The woman," says this valuable author, "should be delivered as soon as we can possibly do it *without violence*. I look upon it as indispensable if the convulsion be not checked by venesection." The lancet, however, should not be spared, for it is a powerful antispasmodic, and acts most efficaciously in disposing the uterus to relax. In these cases I seldom trouble my head much about the quantity,—the effect produced is the main point, and the pulse and general symptoms must be our guide. There is a fact which I have several times observed when bleeding a puerperal woman for cerebral congestion, viz., that after the first dark venous blood which was below the ligature was expelled, the blood has not only become much more florid, but quite thin, and, as it were, watery, so much so, that in one case I could distinctly see the edge of the bleeding cup through the stream. I merely mention it, gentlemen, to draw your attention to it, for I am quite unable, at present, to explain the nature of this phenomenon.

You cannot forget what I told you respecting the effects of copious blood letting in cases of stricture of the uterus; the same holds good

in epileptic puerperal convulsions coming on before birth of the child. If labour has commenced more or less, which is almost always the case, the os uteri will present but little obstruction to your hand, and you will not find much difficulty in turning, or the head will advance so quickly as soon to come within reach of the forceps*. Where, however, the os uteri is closed, and there are no symptoms whatever of commencing labour, delivery must not be attempted. The *accouchement forcé* of the former French authors is a practice not less pernicious than reprehensible, and would run the greatest risk of aggravating the convulsions to a fatal degree. It is an important fact, that convulsions have seldom any effect upon labour—this goes on its course undisturbed. La Motte, in his 222nd Observation, gives an excellent case to show that the course of labour is not to be stopped by convulsions, or even by hemiplegia. During his visit to a lady, who expected every day to be confined, he observed her suddenly to lean her head back, and her eyes and eyelids to become violently convulsed: the convulsion spread itself to other parts of her body, but in less degree. She lost her speech, and her senses were almost gone. "I was afraid," says La Motte, "that her illness would increase, while there was no appearance of labour, although it was now the time according to her reckoning. I ordered her to bed, and made up a clyster, which was given her immediately. Not seeing much relief I gave her a clyster with a few drops of oil of amber in a spoonful of broth, and now and then I held some volatile salts under her nose, and gave her occasionally a few drops of tincture of castor: this had so good an effect that the convulsive motions went off entirely, but her speech and senses did not return; she then remained in bed, taking without difficulty all the nourishments which I gave. Three days after I perceived she pressed her lips now and then, her lips moving at the same time. Observing that this happened by intervals, and that these motions increased, I made no doubt of labour having a great share in them. Upon examining, I found the child's head through the

* Since delivering this lecture, a case of the abovementioned sort occurred to me. I was called to an exceedingly stout plethoric young woman, at the full term of utero-gestation with her first child: she had been in convulsions for eight hours when I saw her, despite of copious bleeding and purging. I found the os uteri fully dilated, the passages cool, &c. I applied the forceps, as she was struggling about upon the bed with the face nearly downwards, not venturing to let her lie upon her side lest she should suddenly turn upon her back and injure herself with the forceps. The convulsions returned slightly for a short time after labour, and then ceased.—E. R.

membranes, sufficiently advanced to make us expect speedy and happy issue. I gave her some good strong broth, and every now and then a few spoonfuls of spirituous liquors, with a little wine to assist nature, which had suffered so much for four days. All these precautions proved of little service, she bearing her pains without moving. Inquiring into the causes of it, by trying to make her move I found that all the right side was paralytic, not having perceived it before by reason of her moving so little before labour came on. She was shortly after delivered of a fine stout boy." I do not make this quotation to recommend La Motte's treatment, but to show you how completely, without warning, convulsions will sometimes come on, and how independent the uterus generally is of them. Although the patient may be insensible, yet the practitioner can always detect the presence of pain; the patient is evidently restless; she writhes her body about every now and then, and moans, or utters indistinct words. The os uteri will now be found more or less dilated, and if the convulsions have not yielded to previous treatment, the child must be delivered by turning or the forceps, according to the state of the os uteri, or situation of the head in the pelvis, for its presence keeps up the irritation and excites a return of the fits.

It was formerly supposed that puerperal convulsions proved fatal to the child, from the shock which the nervous system of the mother sustained being communicated to the child; but this is not the case; nor are convulsions so dangerous to the child as have generally been supposed. Professor Naegelé informed me of a case where, after continued convulsions for twenty-four hours, the child was born alive and healthy, and where the least attempt to apply the forceps had excited such a return of them as rendered it impossible to hasten delivery by artificial means. This distinguished accoucheur has, two or three times, met with a modification of puerperal convulsions, which, with one exception, at least as far as I am acquainted with the subject, has not been hitherto described, viz., where one convulsion runs into another without any intermission, where the patient lies in a tetanic state, and where the uterus actively participates. In these cases the child may easily be destroyed, from the injurious effects of the pressure upon its circulation. Fortunately, however, this very formidable species of convulsion is extremely rare.

The late Wigand, of Hamburg, who was called to almost every case of dystocia which occurred there, divided puerperal convulsions into two species, the *mild* and the *severe*; and from the uterus participating so actively in the general convulsions, I am inclined to suppose that the severe form must considerably resemble the nature of those tetanic convulsions described by Professor Naegelé. In the first vol. of his *Geburt des Menschen*, Wigand

has given a tabular arrangement of the order in which the symptoms of *severe* puerperal convulsions occur, together with the changes

1. Pain in the præcordia.
2. Headach.
3. Dull soporous state, with occasional wandering, but as yet without any visible convulsive movements.
4. Disappearance of sopor; restlessness, grasping the objects near her, moaning, &c.
5. Spasmodic retraction of the head to one side, immediately followed by general convulsions, retraction of the head, with frightful distortion of the face, &c.
6. Remission of the convulsions, and return of the soporous state, but now without any wandering.

I shall not be able to conclude my description of puerperal convulsions to-day, and will

which at the same time take place in the uterus. It is curious, and I will therefore read it to you.

1. } Probable first commencement of the
2. } labour pains.
3. Perfect quiet, and intermission from labour pains.
4. Commencement of a regular and effective labour pain.
5. Complete cessation of labour, or partial or general spasm in the uterus.
6. Uterus perfectly quiet.

therefore resume the subject at our next meeting.

SELECTIONS FROM THE GULSTONIAN LECTURES.

Delivered at the College of Physicians,

BY A. P. W. PHILIP, M.D., F.R.S.

From the nature of the observations I have had occasion to make in the physiological part of these lectures, it will probably appear to the gentlemen I have the honour to address, that the diseases I here refer to arise from certain affections of the brain and spinal marrow; and that the obscurity in which they have hitherto been involved has proceeded from our having so imperfectly understood the functions of these organs.

As we have seen that, on an agent supplied by the brain and spinal marrow, the functions of assimilation, the most important of the animal economy, depend, it necessarily follows that the derangements to which their immediate organs are subject may be of two kinds: they may either be the effect of causes acting directly on the organs themselves, or on those organs which supply an agent essential to their functions; and this inference, from all that has been said of the assimilating functions, we shall find amply confirmed by the course and consequences of their derangements.

As all discussions are the clearer the more definite they can be made, it will be the most distinct plan to consider, in the first place, the derangements of one particular organ, or set of organs; and when the principles are illustrated by the phenomena which attend and are consequent on them, their application to all other cases of the same kind will be easy; and I shall make choice of the digestive organs, both as those of the most powerful and extensive sympathies, and those the functions of

which are most easily made the subject of observation.

In conformity with the results of the experiments above referred to, we find that all diseases affecting any considerable portion, either of the brain or spinal marrow, more or less derange the assimilating functions; and from the greater sensibility and more evident functions of the digestive organs, the effect is generally first, and to the greatest degree, perceived in them. Even a piece of bad news will instantaneously, either by its direct effect on the nerves of the stomach, or by producing a vitiated secretion of gastric juice, destroy the appetite; and mental causes, of a serious and permanent nature, sensibly derange the assimilating functions in every part of the frame. We find similar effects from diseases or accidents affecting any considerable portion either of the brain or spinal marrow. These consequences are as certain as that a vitiated secretion is the consequence of disease of a secreting organ. When such facts are considered, it seems surprising that, independently of all experimental research, it had not occurred to physicians, that in cases of chronic derangement of the assimilating functions, as in more acute affections of the brain and spinal marrow, the fault might sometimes be in those organs. But being prepossessed with the opinion that they were organs of the sensitive functions alone, it was only in the more striking cases that the truth was forced on their attention.

Another circumstance has greatly contributed to the same effect. In a paper, which I lately presented to the Royal Medical and Surgical Society of London, and which was read to the Society at the commencement of the present session, I referred to the facts which prove that the phenomena of sympathy take place through the medium of the central parts of the nervous system; and that the

centres of sympathy in the vital and sensitive systems are not identical; the functions of these systems, although both depending on organs which belong to the brain and spinal marrow, not depending on the same organs. Hence it is that there is a centre of sympathy independent of the feelings, many of the vital organs being parts of dull sensation; from which, and from the other facts there stated, it appears that the most important practical errors have originated. Affections of the digestive organs, for example, have produced the most fatal diseases of distant parts, without any symptom which called the attention of the physician to the source of the sympathy on which they depended, till dissection after death at length pointed out the real nature of the case. It was, for example, at once apparent that the headach of indigestion proceeds from the state of the digestive organs; but thousands of years elapsed before it was known that the hydrocephalus internus has the same origin; and till this was discovered, it was ranked among incurable diseases, so unsuccessful were the only means employed.

From the nature of the investigations in which I have been engaged, and the importance of the digestive organs in the animal economy, my attention was, at an early period, directed to them, and particularly attracted by finding that cases of indigestion occasionally presented themselves, which, although on the whole similar to the usual forms of the disease, ran a very different course, at first not differing in any remarkable degree from the more usual cases, but at length assuming a formidable shape, without any distant organ being implicated, which is almost always, in this country, the precursor of danger in ordinary cases of indigestion, and without any more formidable disease of the digestive organs themselves having made its appearance. Death seemed to arise from the affection of the digestive organs alone; there was no prominent symptom that was not referable to them, and the patient, emaciated to the last degree, appeared to die of inanition alone, in consequence of the digestive organs, even where food could still be taken, being incapable of effecting the necessary changes on it.

It was in considering these cases, and comparing them with the effects I had witnessed from preventing a considerable part of the influence either of the brain or spinal marrow from reaching the digestive organs, that I was led to suspect that the fault might be in the central parts of the nervous system; and on examining the bodies of those who died in this way, I found the brain diseased, and particularly in the parts towards its base and the medulla oblongata, from which the vital nerves proceed.

These cases had always, in their more early stages, been treated as cases of simple indigestion; and the friends assured, that although, being more obstinate than usual, they would be tedious, there was no danger to be appre-

hended from them; and I have seen some of the most eminent of our profession surprised when I expressed an opposite opinion, in which, from the course of the disease, they themselves were at length obliged to join me.

I need not say that it is of essential consequence to be able to distinguish these cases from those of ordinary indigestion at an early period—the only period at which there is any hope of arresting their fatal course.

I shall, in the first place, point out the best diagnosis at which I have been able to arrive; for it will readily be perceived, from what has been said by those acquainted with the principles of our profession, that there must be great difficulty in such a diagnosis, the patient either never complaining at all of the head, or only of such affections of it as we are constantly meeting with, as consequences of common indigestion. I shall then give an account of the appearances on dissection, referring to those in other cases of a similar nature, but of more general derangement, for the purpose of illustration; and, lastly, point out the treatment which has appeared to me most successful, and the principles on which it is founded.

In the first place, of the diagnosis of the cases before us. It is evident, from all that has been said, that the organs of assimilation must not only be exposed to disease from causes operating on these organs themselves, but on those organs also of the brain and spinal marrow, on the agent supplied by which their functions immediately depend; but as in both instances the disease consists of symptoms indicating derangement of the organs in question—the digestive organs, for example—and a certain train of nervous symptoms, in the former case arising from their derangement, the intelligent physician at once perceives the difficulty of distinguishing them. Yet it is evident that they must require very different plans of treatment, because, in the one case, if we restore the digestive organs, the nervous symptoms, the mere consequence of their derangement, necessarily disappear; but in the other there are no means of restoring the digestive organs themselves, unless we can correct the disease of the brain or spinal marrow, or perhaps both, on which their derangement depends; for it appears, from the experiments above referred to,—and we shall find the inferences from them amply confirmed by the phenomena of disease, as well as by the treatment which relieves them,—that the affection of either or both may cause the symptoms we observe.

The difficulty is greatest, however, when the cause is confined to the brain, because the affections of the spinal marrow are generally attended with such local symptoms as necessarily call the attention to the seat of the disease. It is, therefore, to the diagnosis of the former cases that I shall, in the first place, direct the attention; and having considered the more difficult part of the subject, I shall treat of the cases in which the cause of the

disease exists in the spinal marrow, which we shall find strikingly illustrate what I shall have occasion to say on the first part of the subject.

The nature of the cases in which the original cause of the disease is confined to the brain, precludes the possibility of deriving the diagnosis from any particular train of symptoms: it must be collected from a review of the whole circumstances of the case; from the nature of the remote causes, both predisposing and occasional, the general course of the symptoms, and the effects of the means employed. I shall enumerate the circumstances which chiefly demand attention, and endeavour more particularly to point out the principles on which the diagnosis must be founded.

When the patient is not of a variable and hysterical habit,—when the occasional causes have been of a serious and permanent nature, and the nervous symptoms have not shown themselves for some time after the first application of such causes,—when there is not such derangement in the digestive or other organs chiefly affected as accounts for the severity of the nervous symptoms,—when the affections, both of mind and body, are less variable than is usual in what are called nervous complaints, and particularly apt to be referred to the same part of the body,—when there is constantly a more or less general tendency to derangement in the secreting system,—when the heart is more irritable and the lungs less free, the nervous symptoms not yielding so readily as usual, the depression of spirits more uniform, and the pulse tighter than we should expect to find it from the other symptoms—when either the recurrence of feverishness or a sense of chilliness and debility is more frequent than is usual in nervous complaints,—when the constitution seems more affected than usual by the continuance of the disease, the strength and flesh on the whole wasting,—and particularly when the countenance assumes a sallow colour and an habitually irritable and anxious expression; when the usual means are not attended with their usual effects, our stomachic medicines being in a great degree powerless, and alteratives producing but a transitory, if any, improvement in the abdominal secretions; when these, or several of these circumstances, are well marked in what are called nervous complaints, I have been assured, by repeated observation, that they are not to be safely disregarded.

The diagnosis is much assisted by observing the nature of the nervous symptoms in the two cases. There is in our frame, we have seen, what may in a great degree be regarded as two distinct nervous systems—the sensorial and vital. The sensorial functions may be disordered for a great length of time without endangering life; the vital functions, with the exception of respiration, having no dependence on them, and respiration not being endangered till the derangement of these functions is extreme: but disorder of the vital system cannot

go far without danger; and from our mistaken views of the functions of the nervous system it often happens, both where the disease has originated in its vital parts and where it has spread from the sensitive to the vital parts, that danger is frequently unsuspected till, in consequence of the failure of nervous influence, disease is established in some vital organ; for by the vital parts of the nervous system (that is, the ganglionic nerves and those parts of the brain and spinal marrow associated with them) the assimilating functions, we have seen, on which the structure, as well as the functions, of all our organs depend, are maintained. It appears from experiments, an account of which is given in the Philosophical Transactions for 1827, that organic disease of the most formidable nature may be established in the lungs in a few hours, by causes directly influencing their nerves alone.

Thus it is that, in all cases of nervous debility, it is necessary to examine with care the nature of the functions chiefly affected. If these be the mental functions, and we find that there is little or no affection of vital organs but such as is evidently the effect of their derangement, whatever be the sufferings of the patient (and these, from the chief derangement being in the organs of the sensitive system, are often greater than where there is more risk), we may be assured that life is little, if at all, threatened. If, on the contrary, the organs of life chiefly suffer, and that independently of mental affections (especially if the course of the disease be more uniform than that of nervous affections usually is), however purely of a nervous nature the symptoms may be, and however little formidable either in appearance to others or to the feelings of the patient, danger is to be apprehended, and, if the pulse be decidedly tight, is not far distant. I have, in my "Treatise on the Preservation of Health, and particularly the Prevention of Organic Diseases," entered at length into the nature, diagnosis, and treatment of such cases, the fatal termination of which I have often witnessed. Having been confounded with the less important nervous affections, their fatal tendency is frequently so much overlooked, that when it at length shows itself, either by a decided affection of some vital organ or unequivocal symptoms of fatal inanition, it sometimes finds the physician, as well as the patient, unprepared.

By a due attention to the whole of the foregoing circumstances, we may generally distinguish the disease before it is far advanced; and I have reason to believe, from many cases which have come under my care, often succeed in arresting its progress by the means I am about to point out. In the meantime, the nature of the disease will be farther illustrated by turning the attention to the appearances on dissection after death.

This part of the subject will be best illustrated by giving the appearances on dissection in two cases, which, in their early stages, had

been treated as common nervous and bilious complaints, in which I had stated to the other medical attendants, that, notwithstanding there were no symptoms referred to the head, we should find the brain organically diseased; and, by contrasting the appearances found in these cases with those presented when the effects of the disease of the brain was general throughout the system, no part having been very prominently influenced in consequence of the powers of the different organs having been so well balanced, that no one became so much affected as by its affection (according to a general law of our frame) to withdraw the influence of the offending cause from other parts, and, by its loss of function, cut short the disease before the affection of the brain had time to run its course, and thus itself prove fatal.

The first case I shall mention is that of Mr. A., who was taken ill while pursuing his studies at Oxford. His case was regarded by the physicians of that city as one of common indigestion. His health not improving, he was brought to London, and placed under the care of two physicians, well known to the profession here. After he had been in London a few weeks, I was called in, in consultation, and, guided by the circumstances which have been laid before the College, expressed my fears of a fatal termination, and stated my opinion, in consultation, that, although the stomach and duodenum were the organs most prominently affected, I believed we should find the origin of the disease in the brain; and on dissection after death, which happened in a fortnight or three weeks after I saw the patient, and appeared to be the consequence of inanition, the following appearances presented themselves.

The body was examined by Mr. Walker, of St. George's Hospital. The following is his report:—

“On opening the cavity of the cranium, the membranes and the brain were found tolerably healthy, perhaps rather softer than usual, particularly as regards the cerebellum and base of the brain, which, together with the medulla oblongata and cerebral nerves, appeared reduced to a pulpy state, so much so, that they would not bear the slightest handling.

“The viscera in the cavity of the chest presented no unusual appearances; the stomach larger than usual, from distension, and presented that appearance which is called the ‘hour-glass contraction’ of that viscus in a more marked manner than is usually met with; the pylorus much more vascular than usual, and the duodenum much more dilated, vascular, and attenuated than is natural. The whole of the small intestines were more distended with flatus, and much more gorged with blood than in the healthy state, and of a very dark colour. The liver, spleen, kidneys, and pancreas were healthy.”

The following case was that of Miss C., which run the same course as the preceding,

but was of longer duration, having been protracted for more than two years; and here also the patient appeared to die of inanition. Some surprise was expressed that I should wish the head to be examined, as none of the symptoms had been referred to it. The examination was made by Mr. Earle, and the appearances in the brain corresponded, in a remarkable degree, with those just detailed. The symptoms in these cases, as well as the termination of the disease, had been similar, and we find the chief organic affection of the brain of the same kind, and seated in the same parts. The following is Mr. Earle's account of the appearances:—

“In the head, slight effusion beneath the arachnoid membrane; substance of the brain very soft, particularly the crura cerebri and upper part of the pons varolii, which was quite pulpy. Blood-vessels in the substance of the brain large, and loaded with blood. In the chest, right lung greatly compressed by the narrowness of the inferior margin of the ribs, from old adhesions between the pleura costalis and pulmonalis. Substance of the lung firm and hepatised. Left lung more healthy than the right, but slightly hepatised at its upper part.” This state of the lungs, it may be remarked, is peculiarly characteristic of a failure of nervous influence, as appears from those experiments in which the influence of the brain was prevented from reaching the lungs. The patient had been subject to cough and oppressed breathing; pulmonary symptoms, however, had never been a prominent part of the disease. “The heart,” Mr. Earle proceeds, “was remarkably small. In the pericardium, about two ounces of water. In the abdomen, stomach and duodenum much displaced by the compression of the chest by the stays. Towards the pylorus, the stomach much thickened and indurated, the pylorus hard and contracted. The duodenum large and flaccid; the mucous surface very vascular, villous, and soft, readily breaking down on the slightest touch, and apparently approaching to a state of ulceration. Liver almost of a black colour, and gorged with venous blood; substance of the liver hardened. Spleen and kidneys small, but not unhealthy. Intestines generally of a dark colour, from venous congestion.” The circumstance of more general organic disease being found in this than in the preceding case, I shall presently have occasion to explain.

Cases like the foregoing, in which the patient wastes without an apparent cause capable of accounting for the degree of wasting (for he sometimes takes a considerable portion of food), have been often ascribed to mesenteric obstruction, which dissection has disproved, but without throwing light on their real nature, because the necessity of examining the head has not occurred, none of the leading symptoms having been referred to it. And, had it been examined, the appearances observed could not have been connected with the course

of the disease, while the brain was regarded as the organ of the sensitive functions alone.

Such cases are not the consequence of the chyle being prevented from entering the blood, but of its not being formed, the processes by which it is formed having been suspended by the failure of nervous influence; for we have seen that the influence even of any considerable part either of the brain or spinal marrow being withdrawn, is sufficient to derange the process of digestion. Did the limits of these lectures permit, it would not be difficult to show that we have reason to believe that slighter degrees of the same cause influence the course of many chronic diseases, which are benefited by the means which give temporary vigour to the nervous system.

Such are the nature and course of that form of disease of the brain which, from peculiarity of constitution or other causes, chiefly shows itself by affections of the digestive organs and nervous symptoms, which greatly resemble those produced by original affections of these organs. These cases, however, constitute but one form of a numerous class of diseases of the same nature and origin.

Many have attempted to arrange the diseases of the brain according to the different parts of this organ affected. How unsuccessful these attempts have in general been, will at once appear by recurring to them. Their want of success seems chiefly to arise from the great variety of functions which belongs to the brain, the intimate sympathy which exists among many of its parts, and its being inclosed in an unyielding bony case, in consequence of which a disease or injury of one part may affect others, or all others, in a way that could not happen if its parietes were of a more yielding nature. But none of these causes presents any obstacle to a classification of the diseases of this organ, founded on the nature and progress of their symptoms.

They may be divided into two great classes—those which betray themselves by such symptoms as are evidently referable to the brain itself, and those which are only indicated by affections of distant parts, in consequence of derangement of the powers on which both their functions and structure depend.

The latter of these classes is that to which the attention is here directed. They may be divided into those more or less affecting the system generally, and those chiefly confined to particular organs, often assuming, as in the cases just laid before the College, so much the appearance of the original affections of those organs, as to be with difficulty distinguished from them.

One of the most frequent is a species of pulmonary consumption which succeeds such a train of nervous symptoms as that above described, and arises even in those not peculiarly disposed to pulmonary affections, in consequence of the lungs being, of all our organs, most disposed to change of structure, and consequently where there is no particular weakness

to direct the disease elsewhere, feeling most the cause which affects the whole. Of such cases, it is merely said that the long-continued state of bad health had terminated in pulmonary consumption. As the cause of the bad health was not understood, the nature of its consequence could not of course be suspected.

In cases of long-continued wasting and nervous debility, but without any indication of a determination to the lungs, the patient, without an evident cause, begins to cough; a greater degree of dyspnoea on exercise than depends on the state of general debility is observed, and all the symptoms of pulmonary disease rapidly supervene. It is needless to say that such an affection of the lungs, under such circumstances, is incurable. It proves fatal for the same reason that an animal dies from disease of the lungs induced by the removal of the lower half of the spinal marrow, or by the passage of the influence of the brain along the eighth pair of nerves being interrupted; and the friends of the patient wonder that a person, not of a consumptive family, and who had never in all his illness shown a tendency of this kind, should be cut off by a rapid consumption, and that supervening without any evident cause.

There is a case belonging to the same class (although no cases can differ more in their symptoms than it does from the preceding cases) to which I have already referred; the consideration of which is necessary to a clear understanding of the nature of that class of diseases. When the powers of the different organs are so well balanced, that no part becomes the seat of a very prominent affection, and thus, as it were, draws to itself the effects of the failure of nervous influence acting on the principle of an issue, but much more powerfully with respect to other parts, and at length, by proving fatal, cutting short the disease before that of the brain has had time to run its course;—I say, where no part thus becomes the most prominent seat of the disease, it necessarily assumes a very different form; and if it be allowed to proceed terminates by loss of power in the brain itself.

We may infer from what has been said, that we should find, on examination after death in such cases, a general tendency to disease of the vital organs, the disease having run on till the want of nervous influence was felt throughout the system; and more or less general derangement of structure had consequently taken place, but none to such a degree as itself to prove fatal. It will best illustrate these observations to lay before the College an account of a case of this kind, with the appearances on dissection after death.

Mrs. W., a lady between 40 and 50, had from time to time been under my care for some years. She had, more or less, laboured under indigestion, with occasional symptoms of derangement, sometimes referred to one part, sometimes to another, which were from

time to time relieved; and on the whole, although debilitated and what is called nervous, she was for the most part capable of the ordinary duties of life. By degrees the symptoms referred to the head became a more prominent part of the disease. She had been absent from home for some months, during which the affection of the head had greatly increased, and returned in such a state that she soon became apoplectic, and only survived her return about a fortnight.

The body was examined by Mr. Jefferson, of Islington, and the following is his account of the appearances observed:—

“The skull was remarkably thin; in most places not thicker than a shilling. The coverings of the brain very turgid with blood (you would rarely see them more so in a complete case of apoplexy), with a deposition of serum and coagulable lymph between the arachnoid and pia mater. The substance of the brain itself was very firm, and much more vascular than natural; there was rather more water in the ventricles than usual, but no great quantity.

“The lungs were very unhealthy on both sides, being studded with small tubercles, many in a state of suppuration, and others approaching to it. In the heart there was nothing remarkable; perhaps rather paler than natural.

“The liver remarkably firm in texture, and rather paler than natural, but no very morbid appearance in it; the gall-bladder rather larger than natural, and distended with thick viscid bile, and containing fourteen gall-stones, bigger considerably than so many large peas. There did not appear to be any of them in any of the ducts. The stomach was rather smaller than natural, the coats of which were much thickened; the internal, or villous, so firm that it could not be easily torn. The pyloric extremity showed more vascularity, as if from the effect of recent inflammatory action; and it adhered for a considerable extent to the diaphragm and left lobe of the liver. There was nothing particular throughout the remainder of the alimentary canal. The spleen larger than natural; the bladder much distended, but no disease; the uterus remarkably firm, so as to give a cartilaginous feel upon cutting into it; the os uteri very vascular, with a small polypous excrescence from the neck.”

We here see a striking instance of the effects of long continued defective nervous influence. The lungs were very unhealthy, and studded with tubercles, although the disease had never appeared in them in an active state. The secreting power of the liver had been greatly deranged, and this organ was found diseased in structure. The same was true of the stomach, spleen, and uterus. The brain itself, also, was organically diseased, and the patient, none of the secondary affections proving sufficient to destroy life, died in consequence of such morbid distension of its vessels as caused a fatal compression.

The difference in the course of the disease in this and the preceding cases may have been influenced by the affection of the brain being of a different nature.

We see the same tendency to general organic disease in the second of the above-mentioned cases, which, like Mrs. W.'s, had been of long standing, but in which the disease of the brain was cut short by a total failure of power in the digestive organs. In the first case the organic disease was chiefly confined to the duodenum, its state being such as to prove fatal before the failure of nervous influence had had time to produce much effect in other organs less disposed to disease; this case having only lasted a few months, and the tendency to disease in the digestive organs, arising from peculiarity of constitution or other causes, protecting other parts.

There is still another state of the system which may be regarded as belonging, at least allied, to the same class of diseases, and which has an extensive influence in determining the course of various local affections. When a debilitated state of any of the vital organs, the digestive organs or the lungs, for example, takes place from causes directly influencing them, in constitutions the nervous powers of which are less vigorous than usual, and frequently recurs, the debility of the organ first affected spreads to that system, and its debility thus induced influences the original seat of the disease, rendering its morbid state both more obstinate and apt to recur. Thus the same disease proves more or less obstinate in different habits; for I can say, from pretty extensive experience, that such is the cause of obstinacy in many cases of long standing, which, if they are neither relieved nor terminate in a fatal disease of the part originally affected, often at length produce a fatal debility of the brain itself, the patient in the last stage becoming paralytic or comatose. Such, for example, is not an unusual termination of long-continued indigestion in habits whose nervous systems have been debilitated by intemperance, or the effects of sultry climates; and we have reason to believe that in many, in whom pulmonary complaints have frequently supervened and proved severe, the fatal termination has at length been in a great degree the consequence of debility induced on the nervous system, the tendency to organic disease of the lungs keeping pace with the debility induced on it.

On the same principles debility of the nervous system, either original or induced by the existing disease, is often the cause of unusual obstinacy in various affections. Such is the cause of obstinacy in those cases of indigestion which are characterised by constant relaxation of the skin, or a constant feeling of chill, which I have considered at length in my treatise on this disease, and that on Minute Doses of Mercury; and which will yield to no means but such as tend to invigorate the nervous system, in combination with the

treatment of the original disease. We may trace the same cause operating in many similar cases, rendering the disease more or less obstinate, according to the degree in which the nervous system partakes of the debility, and more or less dangerous, both according to that, and the nature of the original affection.

The intelligent physician will readily perceive how extensively the principle I am here endeavouring to elucidate must influence the nature of disease, particularly of chronic disease. In proportion as the central parts of the nervous system become affected, it is evident that the nature of the case approaches to that in which the affection of those parts is the original-derangement.

The prognosis, as well as the nature of the symptoms, in such cases is in a great degree determined by the following circumstance, which depends on peculiarity of constitution. All organs, we have seen, partake both of the sensitive and vital nerves, which have distinct centres of sympathy. Causes of irritation acting on any organ, therefore, necessarily influence the central—that is, the only active parts of both systems; but in certain constitutions they are more felt by the sensitive, in others, by the vital nerves; so that the same affection which in one habit produces hysteria, and other affections of the sensitive system, in another may produce a more dangerous state of debility, characterised by the symptoms above referred to, indicating that the vital parts of the brain and spinal marrow are the chief seat of suffering.

These different tendencies of the symptoms are more remarkable when the original disease is seated in the digestive organs than in most other cases; these organs, on the one hand, possessing the most powerful sympathies, and, on the other, being, at least in this country, little subject to change of structure. Where the sympathies of the organ originally affected are less powerful, and the tendency to change of structure greater, the disease is cut short without the different tendencies of the secondary symptoms becoming equally apparent. Slighter degrees of these effects modify, without changing, the nature of the case; causing, however, a marked difference in the symptoms, as well as prognosis, according as affections of the sensitive or vital parts of the nervous system prevail.

When all that has been said, founded on the facts which were laid before the College in the first part of these lectures, and the phenomena of disease, is carefully compared; the extensive influence of the nervous system in regulating these phenomena cannot fail to be apparent; and as soon as the facts just referred to were established, might have been foretold.

ON THE PHYSICAL HISTORY OF THE EGYPTIANS.

BY T. J. PETTIGREW, ESQ., F. R. S.,

Surgeon to the Charing-Cross Hospital, &c.

(Extracted from his work on Mummies.)

Varieties of Complexion and Figure among Mankind—Present Natives of Egypt descended either from the Arabs or the Copts—Egyptian Physiognomy—Opinion of Jomard—No trace of Negro descent—Opinion of Volney—Browne—Resemblance of the modern Copts to the ancient Mummies, Paintings, and Statues—The Barabras—Opinions of Leigh, Prichard, Madden—Measurement of the Heads of Mummies, Copts, and Nubians—Opinion of Larrey—Blumenbach's arrangement of the varieties in the national physiognomy of the Egyptians—Configuration of the Skull—Methods adopted by Camper, Blumenbach, and Cuvier, to determine the diversities—Description of the Skulls of Mummies—Peculiarity in the formation of the Teeth—Hair of Mummies—Stature of the Ancient Egyptians.

WITHIN the whole range of objects embraced by natural history, there is no one capable of exciting an interest superior or even equal to that which results from a consideration of the variety, both of form and complexion, among mankind. Deeply interesting as this inquiry must be, and important in the highest degree, as it certainly is, in the physical history of man, it is remarkable that little of any value has, until very recently, been elicited upon this subject. The errors and falsehood which abound in the earlier writers have been dissipated by the laborious researches and accurate information of late naturalists, who have much enriched our store of knowledge in this department. * * * * *

The present natives of Egypt are considered to be either the descendants of the Arabs, who overran the valley of the Nile in the early part of the seventh century, or of the Copts, who are regarded by some as the only remains of the genuine Egyptian race. Various opinions have prevailed, and still continue to prevail, as to the primeval race of the Egyptians. By some they have been regarded as of the negro race, by others as having relation to the Chinese, and some have considered them as allied to the Copts of Cairo. The character of the physiognomy of the Egyptian race is distinctly preserved in the mummies. These, according to Jomard*, resemble neither the Copts, Chinese, nor Negro. The Arabs and the inhabitants of Upper Egypt present more resemblance to the mummies and the ancient sculptures than

* Descr. des Hypogées, p. 28.

any besides. This has been particularly observed by the author I have just referred to, and it has been confirmed by the opinions of several of his fellow-travellers. "Plus nous avons cherché à vérifier," says he, "plus l'expérience l'a confirmée. The Negro frequently appears as a captive in the sculptured figures of the Egyptian tombs: his sable complexion, flat lips, and woolly hair are well delineated. The character most commonly represented is of a race very different in appearance, and distinguished by a sharp countenance, a swarthy complexion, the hair curled, but not woolly. It has been remarked* that, in the more ancient as well as the modern sculptures, the leading figures, the heroes of the design, are almost invariably the furthest removed from the Negro expression of countenance, and that they sometimes approach to that character to which we are accustomed to assign the praise of manly beauty. The paintings are said to confirm this view, the pure and uncompounded colours used by the Egyptian artists enabling them to distinguish, if not nicely yet with sufficient clearness, between the different races which they represent. The still more unexceptionable testimony of the mummies is equally strong. Those of the upper orders reveal the almost living lineaments of a people, tawny, not black, with long and sometimes lank hair, and with features which bear no trace of Negro descent.

The celebrated Volney has endeavoured to prove that the original inhabitants of Egypt were Negroes, and that accordingly the world is indebted to that sable race for all the arts and sciences which are generally considered as having been transmitted to us by the ancient Egyptians, and for the erection of those stupendous and magnificent monuments, the remains of which have so strongly excited the admiration of all ages. The testimony of Herodotus † is rather in favour of this opinion; *μελάγχροίς και ουλότριχίς*, "black in complexion, and woolly headed. Mr. Browne ‡ thinks this may apply to the greater or less degree of blackness and crispature of the Egyptians, as compared with the Greeks, to whom the author was addressing himself, and he corroborates this interpretation of the passage of Herodotus by a reference to a similar one from Ammianus Marcellinus §, in which that author says that the Egyptians are *atratis*, a term of equally strong import with the *μελάγχροίς* of Herodotus, but like it evidently applied in a comparative sense; for, in the very next sentence, he says, *erubescunt*, they blush or grow red. It is true, indeed, as Mr. Browne says, that Negroes suffer a certain change of countenance when affected with the sentiment of shame, but it would be rather a bold assertion that the word *erubescere* can ever be applied to characterise the effect of that feeling on a Negro. It may also be urged as a strong evidence against this, that ancient

writers preserve a complete silence as to the Negro character of the Egyptians. In this absence of historical testimony, therefore, we are compelled to recur to the sculptured figures found on the ruins of the temples and tombs, and these, as I have already noticed, are in opposition to such an opinion. The small statues of Isis and other deities, in which the hair is frequently represented of length, go also very far towards contradicting it. It might be supposed that the appearance of the mummies would place this matter beyond doubt, but the mode of embalming, and the substances employed in the operation, tend much to obscure the matter, and it is not possible, in my opinion, to draw any satisfactory conclusion as to the precise colour of the skin of the ancient Egyptians from those preserved specimens of the race.

The present Copts are by M. Niebuhr, Mr. Browne, and others, supposed to be the genuine descendants of the ancient Egyptians, and to preserve the family likeness in their dusky brown complexion, their dark eyes and hair, often curled, their lips sometimes thick, but the nose as often aquiline, and other marks of a total dissimilitude between them and the Negro race. Mr. Browne particularly remarked* the resemblance between the modern Copts and the ancient mummies, paintings, and statues. Mr. Legh † bears his testimony to the similarity of the visage and appearance of the modern Copts to the paintings found in the tombs of Thebes. He remarks, however, that the inhabitants of the island of Elephantine are nearly black, whereas the Barâbras, who live so much further to the south, are considerably fairer in the complexions. But, notwithstanding their colour, the females of Elephantine are conspicuous for their elegant shapes, and are, upon the whole, the finest women he saw in Upper Egypt. The appearance of blacks at Elephantine is certainly curious, and Mr. Legh thinks may, perhaps, be explained by the removal of a tribe of Negroes from the west, and the settlement of a colony in this neighbourhood. Dr. Prichard has arrived at nearly a similar conclusion. In a letter with which he has favoured me, he says that after examining all the evidence he could collect, he drew the inference that the Egyptians were a people "rather resembling the Berberins or Barâbras of the Upper Nile, who are a red or copper coloured race, with hair not woolly, than like the Negroes."

Mr. Madden ‡ believes the ancient Egyptians to have had swarthy complexions and wiry hair, not like the Negroes, but like the modern Nubians. He bestowed some pains in the examination of a great number of the heads of mummies to ascertain this point, and he has given a comparative table of the measurements of the heads of twelve mummies divested of their integuments, of twelve living

* *Quarterly Review*, No. 85, p. 130.

† *Lib. ii.* ‡ *Travels*, p. 163. § *Lib. xxvi.*

* *Travels*, p. 72. † *Ibid.* p. 104.

‡ *Ibid.* ii., p. 89.

Copts divested of their hair, and of twelve living Nubians divested also of their hair. From these observations he concludes, that there is no affinity between the head of the Egyptian mummy and that of the Copt; and he tells us that the great distinction between the mummy and the Copt, in a line drawn right across the orbits from one external angle of the eye to that of the other, is in the greater space of the Copt across the eyes in every skull that he measured, the line across the orbits of the Copt being half-an-inch longer than in the same line of the mummy. In this respect, likewise, the Nubian skull differed nothing from the latter. He describes the old Egyptian skull as extremely narrow across the forehead, and of an oblong shape anteriorly. He supposes he must have seen several thousands of mummy heads; but he says he never found one with a broad expanded forehead. It is among the Nubians, Mr. Madden thinks, we are to search for the true descendants of the Egyptians, a swarthy race, with wiry hair, surpassing in the beauty of their slender forms all the people of the East; living on the confines of Egypt, where probably their ancestors had been driven by the Persians; and possessing a dialect somewhat mixed with Arabic, but which he observed no Arab understood*.

In examining the paintings which still retain so much freshness in the temples at Philæ, Mr. Madden was more struck here than elsewhere by the different complexions given to the two sexes in their pictures: the males were always painted red, and the females yellow. "The few colours," says Mr. Madden, "known to the Egyptians, enabled them to approach no nearer to the real complexions of their race. If a painter had now only the use of the primitive colours, he would find that red would be the nearest approach to the swarthy complexion of the male Nubian, and yellow to the female, whose tint is so much lighter from the less exposure to the sun†. But what struck me as the greatest proof I met with in Nubia of the identity of the Nubian race and that of the Egyptian, is the strong resemblance of the former to the features of all the Egyptian statues. The length of the eye, and the peculiar softness of the mouth, are the two distinguishing characteristics of Egyptian physiognomy, such as their sculpture has transmitted; and these are the very points which are most remarkable in the Nubian countenance. One must have seen the people of Nubia to understand how beautiful is that elongation of the eye, which is peculiar to them and to the Egyptian figures‡."

Baron Larrey considers the Copts to be the

* Travels, II., 95.

† In confirmation of this, I may state that the painted cartonnage of male mummies has the face invariably of a red colour, whilst that of the female is yellow.

‡ Travels, II., p. 117.

true descendants of the ancient Egyptians. He collected a number of the skulls of this people, and compared them with those of the Abyssinians and Ethiopians, and found them to differ very little from each other. He describes the Abyssinians in the following terms:—"L'Abyssin a les yeux grands, d'un regard agréable, et l'angle interne en est incliné chez lui: les pommettes sont plus saillantes: les joues forment, avec les angles prononcés de la mâchoire et de la bouche, un triangle plus régulier; les lèvres sont épaisses sans être renversées, comme chez les Nègres et, ainsi que je l'ai déjà dit, les dents sont belles et moins avancées; les arcades alvéolaires sont moins étendues; enfin, la teinte des Abyssins est cuivrée*."

Professor Blumenbach conceives that we must adopt at least three principal varieties in the national physiognomy of the ancient Egyptians: 1st, the Ethiopian cast; 2d, the one approaching to the Hindoo; 3rd, the mixed, partaking in a manner of both the former. The *first*, he says, is chiefly distinguished by the prominent maxillæ, turgid lips, broad flat nose, and protruding eyeballs, such as Volney finds the modern Copts. Such, according to his description, and the best figures given by Norden, is the countenance of the sphinx; such were, according to the well-known passage of Herodotus on the origin of the Colchians, even the Egyptians of his time; and thus hath Lucian represented a young Egyptian at Rome.

The *second*, or Hindoo cast, is characterised by a long slender nose, long and thin eyelids, which run upwards from the top of the nose towards the temples, ears placed high on the head, a short and very thin bodily structure, and very long shanks. As an *ideal* of this form, Professor Blumenbach adduces the painted female figure upon the back of the sarcophagus of Capt. Lethieullier's mummy in the British Museum, and which, he thinks, most strikingly agrees with the unequivocal national form of the Hindoos, which is so often to be seen upon Indian paintings.

The *third* sort of Egyptian configuration, he says, is not similar to either of the preceding ones, but seems to partake something of both, which must have been owing to the modifications produced by local circumstances in a foreign climate. This is characterised by a peculiar tinged habit, flabby cheeks, a short chin, large prominent eyes, and rather a plump make in the person. This is the structure most frequently to be met with†.

The configuration of the skull offers the most important diversities in the human form, and the attention of Professor Camper, Professor Blumenbach, and the Baron Cuvier has been principally directed to this point. Each of these eminent naturalists and physiologists

* Notice sur la Conformation Physique des Egyptiens, p. 3.

† Philos. Trans. 1794, p. 191.

has proposed various methods to arrive at a precise knowledge of the different appearances, and adopted peculiar modes of classifying them, and reducing them to general principles. Anatomists cannot fail to observe the great variety which exists in crania belonging to different nations; and, although these are sufficiently constant to mark the national peculiarities of the class to which they belong, yet so gradual are the changes or shades leading to this variety to be traced, that it is with much difficulty they are rendered perceptible.

As the most remarkable difference in the heads of man and other animals is principally observable in the relative proportions of skull and face, it has been proposed to ascertain the nature and extent of these by the application of what is called the *facial line*. Professor Camper was, I believe, the first to adopt this method; and his plan consisted in drawing a line from the most prominent part of the forehead to the most projecting part of the upper jaw: this he called the facial line. Another being drawn from this latter point in a horizontal direction, and extended to the opening of the external ear, enabled him readily to take the angle formed by the two lines, and thus he endeavoured to determine the degree of intellectual character of the individual, by marking the relative proportion between that part of the skull in which the brain is contained and that of the face, which is known to be the principal seat of the organs of sense. He thus considered the form of the skull principally with reference to the varieties of expression imparted to the countenance by the diversity of its configuration, and to the supposed connexion of this formation with the character of the mind.

That the mode proposed by Camper will, to a certain degree, point out the general character of animals, and manifest the extent of docility and instinct possessed by them, is unquestionably true, and founded upon anatomical and physiological knowledge; for Professor Soemmering has long since satisfactorily shown* that, in proportion to the size of the brain exceeding that of the rest of the nervous system, do animals approach in a greater or less degree to what we term reason. The face is the chief seat of the organs of sense, as the cavity of the skull is of intellect, and the development of each is correspondent to the character of the animal. Man has by far the largest skull, properly so called, and the smallest face; and, in proportion as other animals deviate from this condition, do they also manifest their stupidity and ferocity. But the facial angle is insufficient to exhibit the characteristics of the skulls of different nations: it is chiefly applicable where varieties in the form or prominence of the jaws are most remarkable; and it has been justly re-

marked that crania of the most different nations, which differ *toto caelo* from each other on the whole, have the same facial line; and, on the contrary, that skulls of the same nations, which agree in general character, differ very much in the direction of this line*. Reference to the *Decades Craniorum* of Professor Blumenbach will abundantly prove this position.

The facial angle of man varies from 65° to 85° †. In the representation of their deities and heroes, the masters of Grecian art carried this angle to 100° , and every one must have been struck with the high and elevated character of their ancient statues. This practice is, therefore, in strict accordance with the principle of Camper. The facial angle, however, will only give us the dimensions of the skull in one direction; and, should its capacity vary essentially, either posteriorly or laterally, we acquire no information of this condition by the method of Camper. Baron Cuvier felt this deficiency, and endeavoured to supply it by proposing two sections of the skull and face—one vertical and the other longitudinal. By these means we are enabled to ascertain with precision the relative proportions of the skull compared with those of the face: thus the extent of the intellectual and sensitive structures becomes apparent‡. Professor Blumenbach felt also strongly the difficulty of adopting any one mode by which the variety of appearances in the conformation of the skull could be shown, and he was induced to employ a method different from either that of Camper or Cuvier, and by which he conceived that, at one glance, he could distinguish the greater number of distinctive marks of the skulls of different individuals and nations. This method is also founded upon the comparative magnitude of the jaws, thus based upon the relative proportions of skull and face. His method was to place various skulls upon the table in a row, and contemplate them from behind. By this means he obtained a good knowledge of the breadth or narrowness of the skull; and, according as the face projected or receded, he obtained a view of its relative magnitude or diminutiveness. This is, I think, the best method that has been adopted.

Blumenbach classes the heads of the Egyptian mummies in his first grand division—the Caucasian variety, a class which, as Mr. Lawrence has said, “includes all the human races in which the intellectual endowments of man have shone forth in the greatest native vigour,

* Lawrence's Lectures on Physiology, Zoology, &c., p. 333.

† Dr. Granville gives the facial angle of his measuring at 80° . M. Jomard states it to be from 75° to 78° in those he examined in Egypt.

‡ The proportions thus obtained are curious and worthy the attention of the reader: they may be found in the *Leçons d'Anatomie Comparée* of M. Cuvier.

* Diss. Inaug. de Basi Encephali et Originibus Nervorum Cranio Egreddentium. 4to. Gottingen, 1778. Vide lib. V.

have received the highest cultivation, and have produced the richest and most abundant fruits in philosophy, science, and art, in religion and morals, in poetry, eloquence, and the fine arts, in civilisation and government, in all that can dignify and ennoble the species*."

The assertion of Volney, that the ancient Egyptians were Negroes, is not supported by the examination of the mummies. The heads of mummies are, however, far from displaying a uniformity of appearance, and the situation of Egypt has been observed to favour the notion of a mixed population, emanating at various times from different quarters of Africa, Asia, and Europe. The communication with Arabia and India by the Red Sea, and with Africa from the south and west, may account for some of the varieties afforded among mummies, and in the representations of the painter and sculptor. No distinctly or unequivocally Negro skull, has, I believe, been found among the mummies; the one most approaching to that character, by the projection of the jaws and reclining forehead, was in the mummy of Mr. Saunders, now in my possession; but this differs in many respects from the skull of the Negro.

Blumenbach has figured three skulls from mummies in his *Decades Craniorum*, Nos. 1, 31, and 52. No. 1 represents the head of an Egyptian mummy purchased of a Dantzic merchant in 1779. The skull is compressed at the sides, chiefly towards the top. The forehead is small, but rather elegantly arched. The eyebrows are very prominent, and the orbits large. The cheek-bones appear large from the malar fossæ being much sunk. The lower jaw is large and strong; the crowns of the incisor teeth are described as thick, cylindrical, or obtusely conical, rather than lancet shaped. "Coronæ crassæ, cylindricæ magis aut obtuse conicæ quam scalpiformes †." The hinder part of the head projected greatly. The Professor sums up his description by declaring the skull to possess the same character as that which the great works of ancient Egyptian art aspire to. "In universum hujus cranii habitus eundem characterem præ se ferre videtur quem et ingentia Egyptiacæ artis veteris opera spirant, non quidem elegantem et pulchellum sed magnum."

No. 31 is the skull of a male, and is less compressed at the sides than the preceding, and the cheek bones are a little narrower, and the eyebrows not so prominent. The same appearances of the teeth presented themselves in this as in the former skull. The incisors in each jaw, but particularly the upper one, were not wedged like lancets, bent on the inside, and terminating in a transverse point, as is the case with teeth destined by nature for cutting or dividing the food; but thick, obtuse, and towards the outermost rim obliquely truncated on its broad face. Professor Auzienreith of Tubingen, presented to Professor Blumen-

bach an impression from a copper-plate engraving representing the jaws of a mummy, the teeth of which so perfectly corresponded with those above described, that Professor Blumenbach says you would imagine they had been drawn from those belonging to his skull. I have observed the same description of teeth in three heads of mummies. The same has been remarked by Dr. Middleton in the Cambridge mummy*, by Bruckmann at Cassel †, and something similar by Storr, in a mummy preserved at Stuttgart ‡. This appearance of the teeth, however, is not found in other specimens. Professor Blumenbach could not observe it in the Gottingen mummy, or in two that he examined at the British Museum; but he found this peculiar structure in the mummy of a child about six years old, belonging to John Simmons, Esq.

Of No. 52 no description is given, and I lament this the more as the skull simply noticed as "Mummia Ægyptiacæ tertîæ," differs from the two already noticed, and corresponds to that of my Græco-Egyptian mummy. A front view only is given; there is no lower jaw, and the incisor teeth are wanting.

Professor Soemmering has also described three heads of mummies. In one of these he notices a larger space marked out for the temporal muscles, but in no other respect does it appear to partake of the Negro character. The other two are distinctly mentioned as not differing from the European formation §. I can state the same of the greater number of skulls in my own collection, or that I have been able to examine elsewhere. Baron Cuvier examined more than fifty heads of mummies, and he says that not one of them presented the characters of the Negro or Hottentot ||. I have seven heads of Egyptian mummies in my collection, and with the exception of one specimen, that of the mummy of T. Saunders, Esq., there is not the slightest approximation to the Negro character.

Herodotus has stated the skulls of the Egyptians to be remarkably thick. This observation has not been confirmed by any other writer, and it is denied by many. I have seen the skull exceedingly thin, although the individual to whom it belonged had not attained an advanced age.

The hair of the mummies, as has been already noticed in the chapter on embalming, varies much in its character. In some instances it is long and smooth; this was the case with the mummy described by Denon, in another by Belzoni, and is also noticed in the large French work on Egypt. Mr. Wil-

* *Miscell. Works*, iv. p. 170.

† Account of this Mummy, Brunswick, 1782. 4to.

‡ *Prodromus Methodi Mammalium*, Tubingen, 1780. 4to.

§ *De Corp. Human.*, fab. i., p. 70.

|| *Memoires de Muséum d'Histoire Nat.*, iii, p. 173.

kinson brought me three heads from Thebes, and one of these exhibited a profusion of dark brown hair, upwards of a foot in length, and at the back part was platted in three distinct portions, exactly as it is done in this country and in Egypt by the females at the present day. In my Græco-Egyptian mummy, and in Dr. Lee's mummy, the hair was very short and smooth; in Mr. Saunders' mummy it was short and curled. The head of Horseise, as is the case with all the priests, was shaven close. It is difficult to say any thing precise with respect to the general colour, which appears frequently to be affected by the process of embalming; in the greater number of instances it has obtained a reddish hue, but I have frequently seen it quite black and occasionally grey.

The stature of the ancient Egyptians would, from the measurements I have taken and collected of different mummies, appear to have been somewhat diminutive. In no instance have I been able to meet with a mummy that, even enveloped in its bandages, would measure more than five feet six inches. The following collection will demonstrate this subject:—

I. Male Mummies in their Bandages.

	Ft.	In.
1. Græco-Egyptian mummy	5	6
2. Mummy at Dresden	5	3
3. Capt. Lethieullier's mummy at the British Museum	5	2
4. Mummy at the British Museum (varnished specimen)	5	2
5. Mummy at the Museum of the London University	5	2
6. Mummy of a youth at the British Museum	5	0

II. Female Mummies in their Bandages.

1. Dr. Mead's mummy*	5	5
2. Mummy in the Museum of the London University	5	1
3. Mummy at the British Museum	5	0
4. Mummy at Dresden	4	11½
5. Dr. Perry's mummy	4	10

III. Unrolled Male Mummies.

1. Mummy belonging to the Royal Asiatic Society, at the Museum of the King's College	5	5
2. Græco-Egyptian mummy	5	4
3. M. Cailliaud's Græco-Egyptian mummy	5	3½
4. Mummy of Horseise at the Museum of the Royal College of Surgeons	5	3½

IV. Unrolled Female Mummies.

1. Mr. Davidson's mummy	5	2
2. Dr. Granville's mummy	5	0¾
3. Dr. Lee's mummy	4	11

* This so much exceeds all the instances I have measured, that I am disposed to think there has been some mistake in the statement.

Reviews.

Cyclopædia of Anatomy and Physiology.

Edited by ROBERT B. TODD, M.B., &c.
Part I. Sherwood.

IN reviewing a work like the present—a work which, if executed like unto the present number, will be a record of all we know or believe in anatomy and physiology—we pause at the onset: the comprehensiveness of the subject, the multifarious topics it embraces, and their diversity, verily perplex the mind of the reviewer. To panegyrisé a work of this description, when but a single part has appeared; or, on the contrary, to abuse it in that vile invective so common, would be on either hand uncharitable, unfair, and foul indeed. As chroniclers of passing events, we are anxious to represent things as they are:—our motto is, “Nothing extenuate, nor ought set down in malice.”

The present is said to be the day of innovation—if by innovation is meant the removal of obnoxious doctrines, edicts, or by whatever term they may be denominated—we confess ourselves partisans. But, after all, science should never defile her fair hand with politics: she is alien to tenets—to party feeling: she stands aloof like the winged eagle in the sublimity of her soarings: to her all is nothing but *truth*—that is her goal—to that every collision of feeling, and every conflicting opinion, must ultimately give way.

Medical science is a comprehensive phrase; it comprises the whole range of philosophy—from a marble in its roughness to man in the polish of intellectual grandeur. Let us, however, leave the flight of imagination, and come down to the work before us. When we tell it, that the present work is under the management of one of the most meritorious and talented physicians of the present day, Dr. Todd,—and mention the names of St. Hilaire, Breschet, and Milne Edwards, of Bostock, Brande, Grant, Craigie, Owen, Bell, and a host of others of no mean reputation, of men in almost every part of Europe renowned for their acquaintance with particular subjects, we need not offer an apology for entering so minutely as we shall do into the merits of the work. In performing this duty, our object shall be, to prove the work deserving of encouragement, or deserving of disparagement: *facts* shall be the arguments. It is but just, perhaps, that we present the pretensions of the Editor, in the prosecution of his object, in his own phraseology. “It is intended,” he says, “that the Cyclopædia of Anatomy and Physiology shall embrace the whole of the sciences,” &c.

When we reflect that all branches of science have been included in an *Encyclopædia*, or in a “Cyclopædia of Science,” we cannot, surely, be surprised that the doctrine of animal

bodies,—of their mechanism in health, and their combined and their individual actions, and the functions of their individual parts, with the alterations which time, and decay, and disease, may create,—should be preferred to be given in a “Cyclopædia of Anatomy and Physiology;” nor that a work of such character should be selected for the purpose. They may be prescribed within the limits proposed, with advantage to the profession, and with great benefit to science, we unhesitatingly affirm. *Learning* comprises a copious detail of manifold acquirements. *Knowledge*, which is immediately applicable to mankind, is exceedingly limited; the casuist might say it may be compressed into a “nut-shell.” Alas!

The first article in the Cyclopædia is by the Editor: it consists of a description of the Walls and Boundaries of the Abdomen; the subject is treated, though in a diffuse, yet in a perspicuous, manner. After defining the term *Abdomen*, and showing its existence and its character in the various classes of animals, from the insecta, through the progressive orders of animals upwards in the scale of creation, to man, the abdominal parietes of the human subject is described; the deficiency of osseous matter, the muscular and tendinous character, the various openings which are perceptible to the eye of the anatomist, the structures which pass through these foramina, in short, the various component parts of the abdominal walls, are clearly, definitely, and accurately described. We have, at page 3, two steel engravings, copied from Gerdy, and admirably executed, representing the external surface of the body, one of the anterior, the other of the posterior, part. The *linea alba*, the *umbilicus*, the *lineæ semi-lunares*, and the *lineæ transversi* with their intervening elevations, are, in the first figure, graphically represented. In the second figure, the different lines, curves, and elevations are also apparent.

The abdomen is divided into compartments, which are clearly defined, and the etymology of the terms is noticed.

A minute description of the components of the walls is given, commencing with, first, the skin and its appendages; secondly, the superficial fascia, its density and relative thickness in the different regions; thirdly, the muscles, aponeurosis, fascia transversalis, peritonea reflexa, are methodically described; and here are described the boundaries of the inguinal canal, its openings, and the various structures which enter into their conformation. At page 7 are two wood-cuts, one representing the mechanism, the situation, and the relations of the cremaster muscle: the other presenting a transverse section of the abdomen, copied undoubtedly from Cloquet or Paxton.

At the conclusion is a wood-cut presenting a view of the vessels, &c., at the posterior part of the abdomen—above, the diaphragm and its openings, below, a perspective of the

cavity of the pelvis, and, laterally, a section of the various laminæ of the walls of the abdomen.

These are the topics discussed in the present article; the visceral anatomy and physiology, and the functions, of the different parts are allotted to distinct and separate treatises. A copious bibliography follows.

“Absorption” next follows, by Dr. Bostock, and is treated with that acumen and learning which the author so invariably displays. He takes a general survey of the various hypothetical views of the subject from the days of Fallopius, nay from the age of Galen, Erasistratus, and Herapphilus, up to the present period, noticing, *en passant*, the discoveries of Rudbek, Bartholin, and Mascagni; of Joliffe, of Aselli, of the Hunters, of Monro, and Hewson. Each author hath awarded to him his respective merits, which the impartiality of Dr. Bostock’s writings ever presents. The views entertained at the present day, the opposite ideas of the British and French physiologists, the former being founded by John Hunter, the latter by Magendie, are fairly balanced. There is given, in fine, in this essay, all that we know, or at least the most accredited opinions, on the subject of absorption. The bibliographical part is exceedingly copious; and though this article may not increase the reputation of Dr. Bostock, yet his reputation will not sustain any detraction.

The succeeding articles we shall enumerate: *Acalephæ*, Dr. Coldstream; *Acids*, Animal, W. T. Brande, Esq.; *Acrita*, R. Owen, Esq.; *Adhesion*, B. Phillips, Esq.; *Adipocire*, W. T. Brande, Esq.; *Adipose Tissue*, Dr. Craigie; *Age*, Dr. Symonds; *Albina*, Dr. Bostock; *Albumen*, W. T. Brande, Esq.; *Amphibia*, T. Bell, Esq.; *Animal Kingdom*, Dr. Grant.

We are so well satisfied with the first part of this work, that if the succeeding ones are as efficiently executed, it will be pronounced, by the united voice of the profession, the only work of its kind *as it is*, and the most splendid that was ever published in any age or in any country.

We cannot leave the present notice without expressing our approbation of the excellency of the wood-cuts: they are executed with great neatness and fidelity. In our next number we shall continue the notice.

On the Medical Properties of the Natural Order Ranunculaceæ, and more particularly on the Uses of Sabadilla Seeds, Delphinium, Staphisagria, and Aconitum Napellus, and their Alkaloids, Veratria, Sabadilline, Delphinine, and Aconitine.
By A. TURNBULL, M.D. pp. 171. Lougman. 1835.

In our notice of Dr. Turnbull’s pamphlet on Aconitine we commended his having attracted our attention to the ranunculus order of plants,

believing that, from the potent agency which they are known to exert upon the healthy system, they would be found, as, however, we already know, useful in disease.

But in commending the conduct of Dr. Turnbull, we had not the slightest intention of giving our approbation to the sweeping extent he carries those remedies. He will soon pass through Cullen and Mason Good's Nosologies, and cure every disease; and every form of disease, primary sequela and sub-sequela, will flee before the active product of *ranunculus* plants. The Doctor, however, at the conclusion of his preface, shields himself from such a charge,—the charge of empiricism, which is whispered, and which otherwise might be attempted against him. Quackery we abhor; but it abounds so profusely in this country, and is so actively supported by the legislature, that, really, quackery is becoming a very reputable calling.

“The author would caution the profession against expecting too much from the employment of these remedies. In some cases they have given only a temporary relief, whilst in others they have had no effect; but, generally speaking, he has found them of much more advantage in the treatment of a very distressing class of affection than any means hitherto discovered, and on this account he would recommend them.”

The preparations of the *Sabadilla* seeds is the only article to be noticed, the others having been before alluded to. The *tincture* is made by adding to the seeds as much alcohol as will cover them, and digesting them for ten days. This preparation is recommended as an excellent rubefacient in local affections, the class of diseases to which these medicines are particularly applicable. Its action is to produce an eruption when frequently applied; when rubbed over the cordal region the heart's action becomes abated: hence it is found useful in nervous palpitation. So is a mustard plaster. An extract made by evaporating the above tincture may be given with advantage, in the dose of a sixth of a grain, ter in die, in rheumatic and neuralgic affections.

Now, though we agree with Dr. Turnbull in the general efficacy of the remedies under notice, and though we may be disposed to place implicit credence in his testimony, we must confess we should have preferred—have been at any rate more satisfied—to have seen a few of his unsuccessful cases narrated. Dr. Turnbull must be thoroughly aware that for a physician to possess a permanent reputation, and permanent professional success, he must have the friendship of his professional brethren; he must record facts in science. Sound philosophical and useful records would ultimately serve a man's purpose better than the setting of traps to catch whimsical and ignorant patients, or to acquire an ephemeral reputation.

Observations on Climate, Diet, and Medical Treatment in France and England. By CHARLES HIGGINS, M.D., M.R.C.S.L., &c. Bergess and Hill. 12mo, pp. 108, 1835.

THE present Treatise scarcely admits of a review. We cannot imagine the motives which induced the author to write it, unless to present to his friends and probably patients. To the profession it cannot possibly be of the slightest utility, unless it might relieve the mind of the student as *light* reading, after laborious mental exertion. It is strictly a popular production; and if the doctorial titles had not been affixed, we should have supposed it to be the production of an amateur who had read a little of everything, physic included; had casually observed the climate, diet, &c. of France and England; and had put his observations down desultorily at his leisure.

There are a few morsels that might be extracted into a Sunday newspaper, and afford a few moments' amusement to its readers; such as cats being served up to dinner to some novices, and after they had finished the repast the *cat* was let “*out of the bag* with a vengeance.”—about an Englishman being ordered by a French physician an enema, and the patient, not knowing French well, mistook it for something else, &c. All of which would be very pretty in “*a story-book*,” but not very apropos in a philosophical work certainly. But—

“’Tis pleasing, sure, to see one's name in print:

A book's a book, although there's nothing in't.”

Reports of Societies.

WESTMINSTER MEDICAL SOCIETY.

Saturday, April 25th, 1835.

DR. ADDISON, President, in the Chair.

DR. NEGRI presented to the President ten small calculi which he had just received from a female who had consulted him for a confined state of the bowels and an abscess that had formed in the right iliac region, communicating, he thought, with the cæcum, through which communication the concretions passed.

Many members were anxious to learn whether a cherry-stone formed the nucleus of any of the calculi, as he (Dr. N.) related that the lady had informed him that she had swallowed some.

Dr. Negri, in reply, regretted that it was not in his power to give any information concerning their composition, not having had sufficient time since they were voided to

examine them, save the interior of one, which being cut through presented a crystalline appearance.

The Doctor inferred, from the almost constantly obstructed condition of the alimentary canal that she suffered from, that it had become reduced to nearly an impervious tube, as seldom or ever any solid feces, but only liquid stools, were discharged, and these were not mixed with scybala.

While his patient was residing at Milan, about three years back, an obstinate constipation occurred, but was eventually benefited by the exhibition of large doses of castor-oil, which medicine she had continued taking since, by the advice of several practitioners who have been consulted, which led him to prescribe the compound extract of colocynth, (in solution, from her inability to swallow pills,) and as yet with good effect.

Mr. Queade considered the case highly interesting, and requested to be informed whether any fecal exhalations were discernible from the surface of the abscess, or from the matter that escaped?

Dr. Negri answered none, nor did the abscess or condition of the constitution pourtray any observable change, than what is produced by other abscesses; the novelty and interest of the case consisting of the formation of the calculi, and their exit through the artificial opening.

Mr. Henry Johnson acknowledged the frequency of these cases, and with which he considered every member conversant; but concerning those that were occasionally found situated between the tendon of the internal oblique muscle, &c., and the peritoneum, all present were probably not so familiar. Three cases that he had watched in St. George's Hospital, while house-surgeon to that institution, which proved fatal, were briefly related; but some important facts the speaker could not sufficiently recal to his recollection, from the time that had transpired since their occurrence.

After which, by the desire of the President, Mr. H. Johnson read a paper entitled "Some Remarks on the Venereal Condyloma and on Venereal Warts." The author considers that the venereal condyloma has not received from the profession that attention it merits, it being regarded as merely the result of acrimonious secretions or inattention to cleanliness, and simple remedies considered sufficient for its cure. Should it not yield to these, escharotics are generally freely applied.

The author defines venereal condyloma to be an interstitial thickening of the cutis, more or less disposed to circularity, smooth, neither fissured nor lobulated like warts, and possessed of great vascular organisation.

The venereal condyloma, for convenience of description and methodical arrangement, he divides into three varieties of form.

The first form of condyloma is a flat, super-

ficial, and nearly circular deposit in the cutis; surface smooth and soft, its thickness from a sixpenny to that of a penny piece, and rather larger than a split pea, vascular, and its colour redder than that of the surrounding skin, and more frequent in women than in men. Situation, in females, at the lower half of the labia, perinæum, the nates contiguous to the anus, particularly the thighs, where they join the perinæum. In the male, at the lower surface of the penis, to the sides of the scrotum, where they meet the thighs. In both sexes it is accompanied with a discharge from the vagina or urethra, which is profuse and thin, and of a yellowish colour (chronic gonorrhœa), probably the growth occasioned by the latter.

Treatment.—Cleanliness, to ensure which the author recommends the regular use of the hip-bath, accompanied with mild and unirritating food, bland drinks; aperients, such as calomel and blue pill followed by the infusion of senna and the sulphate of magnesia; astringent injections in preference to those of a stimulating nature, such as the supracetate of lead with decoction of poppies, or alum dissolved in a decoction of oak bark.

For the removal of the condylomatous deposits, the author reprobates having recourse to the knife, ligature, or powerful escharotics, but recommends cloths dipped in strong Saturnine lotions combined with the medicines already mentioned, or should not this be found sufficient, to use a lotion composed of the oxymercurate of mercury and distilled water ($\frac{1}{2}$ a grain to iii. grains of the former to $\frac{3}{4}$ j. of the latter) two or three times a day, and lint dipped in it should be constantly applied to them. By the use of this application salivation may be occasionally produced, which the author has witnessed.

The second form of condyloma, the author regards as an advanced condition of the first, ulceration having taken place, which may either be shallow or cupped, their base firm, and all the sores raised above the level of the surrounding integuments, constituting the true condylomatous deposit.

The ulcerated condyloma is possessed of highly contagious properties; also more frequent in women than in men, and is likewise attended with a profuse discharge from the vagina or urethra.

The third form is an advance on the second, like the second on the first; but here the distinctive characteristics of condyloma are not so evident, presenting a confused mass of morbid growth, seated chiefly in the cutis, and the author expresses a doubt whether it may or may not be a venereal symptom, for in some cases filth appears to give rise to it, and in others it is clearly the result of the discharge.

The secondary symptoms consist of bubo, ulceration of the tonsils, a peculiar affection of the lip and tongue, with scaly eruptions on the skin.

The tonsils are enlarged, and display on their surface always a whitish and superficial ulceration, which two symptoms with condylo-ma the author believes have never been pointed out, or, indeed, that any secondary symptoms have been noticed as arising from it.

The author divides the eruption on the skin into three kinds, the papular, the pustular, and the scaly; with the latter must be ranked the pityriasis-like stain.

As the second form presents symptoms not observable in the first, additional treatment is required, viz. a mild mercurial course, the state of the constitution having been in the first instance as much improved as circumstances will permit. The mercury not to be pushed too far without the combination of tonics, as sarsaparilla, which the author regards as the best, with the addition of good nourishing diet.

For the local treatment, when the parts are inflamed, the author uses tepid bathing, poultices; to heal the ulcerations, the common black wash; and to disperse the growths, the lotion of oxymuriate of mercury (the strength as named above).

The second division of the author's important paper treats of warts, of which growths he considers there are many varieties; but that can be very well classed into two heads; first, the highly vascular, and, secondly, those which are comparatively but little so: the former attains a larger size than the latter, like all other tumours plentifully supplied with blood. Situated, in the female, mostly at the orifice of the vagina, the inferior commissure, the perinæum, and at the margin of the anus. Colour, pinkish-red, soft and lobulated, usually attached by a pedicle, but sometimes arising from a broad base; bleeding freely when wounded, and rapidly reproduced. When confined within the prepuce, occasions phimosis, by which means the sanious discharge becomes partly locked up, and partly escapes, irritating, and excoriating, and inflaming the inner surface of the prepuce, on dividing which the glands bear a striking resemblance to the head of a cauliflower, save as regards its colour.

The second division of warts is usually seen in small insulated clusters; they feel firm like granules; are about the size of peas; of a brownish colour, with a pedicle much narrower than that of the vascular.

For the treatment of the first kind the author recommends the undiluted liq. plumbi superacetatis to be used twice daily; if unsuccessful a strong acid is the best, although severe. But a still severer treatment, if the patient will submit to it, the author prefers for expedition and success—the liquor plumbi with excision.

For the treatment of the second, excision, touching the cut surfaces with the nitrate of silver.

When discharges co-exist with warts, they

must be stuped, and the general health improved*.

Dr. Leonard Stewart complimented Mr. Johnson on the satisfactory manner in which he had achieved his difficult undertaking; but he (Dr. S.) was anxious on one point to be more clearly informed, leaving other points to the consideration of the able members present, who were more conversant with the subject than himself; viz. whether the condyomatous or condylo-ma affection (he believed it signified not which term was made use of) may exist independent of either the syphilitic or gonorrhœa taint?

Mr. H. Johnson replied, that he was sorry he was not able to give a satisfactory answer, on the grounds as stated in the prelude to his valuable paper; that it was not his wish at present to enter into any disputed points, but confine himself solely to facts, as on them alone he had depended for the deductions he had drawn.

The President requested to know whether Mr. Johnson had made any trial of the cupri sulphas, in the ample opportunities that had offered themselves to his notice, and which it was manifest he had taken every advantage of, for he (Dr. Addison) had found, although it produced considerable pain when used, it nevertheless seldom failed to eradicate the enlargement.

Mr. Johnson replied in the affirmative, and when reduced to a powder, with considerable benefit.

Mr. Greenwood said he was firmly convinced, from what he had observed of the dif-

* When the warts cannot be removed by the knife, (their magnitude and situation forbidding, unless recourse is had to amputation of a portion of the penis with it,) we have found no applications, after giving all a fair and impartial trial, equal to the strongest pyroligneous acid, or two parts of the muriated tincture of iron, combined with one of water; for when thus mixed it acts more energetically and efficaciously than when the water is absent. Whichever remedy be selected, it must be applied to the excrescence by the means of a quill, so that the whole surface may be cautiously touched with it, and then covered over with a small warm bread poultice. This is to be done daily, and a cure, as far as regards the warts, may be safely prognosticated at the expiration of a fortnight, although enlarged to the size of an ordinary orange, and to this it may be come in a very few hours, when the phymosed condition of the prepuce only incompletely embraces it; which of course must be liberated almost invariably before the remedial agents are applied; and previously to doing so, from the shattered state generally of the patient's health, it will be found advisable to administer free doses of opium, to prevent the pain that will be occasioned by either remedy still further reducing it.—*Rep.*

ferent forms of syphilis, that very little, however much might either be said or written about it, was understood, and that he was strongly induced to believe that Mr. Johnson had been misled, through a desire of making himself known, and especially on that point on which the author laid so much stress, viz. the superficial ulceration of the tonsils dependent on condylomæ, for he considered this as deserving very little reliance, in proof of which he had a case * of a female patient, affected with condyloma, now under his eye and fresh in his memory, where the ulceration of the tonsils was as strictly fissured as any case of ulcerated tonsils that he had ever examined. As to the division that the author had been induced to adopt, he considered it also objectionable.

Mr. Johnson said, that, as far as he could understand Mr. Greenwood's case, it ought not to be regarded as one in point, as he had to rest on statements made by the patient, which were very seldom to be relied on; and as to the divisions that he had adopted, that they were rather degrees of the same complaint than perfect varieties he acknowledged, but would be found convenient in a theoretical view, but, in a practical view, such artificial separations were not required, nor regarded by the expert surgeon. To the third charge, of wishing to puff his own name into notice, he trusted that if Mr. Greenwood had mistaken him the other gentlemen had not.

Mr. Costello begged to be informed, as it was the last evening of the session, how many of the promised papers had been read?

Mr. Thurnan, the Secretary, answered nine, or thereabouts; but he believed, or hoped, that measures would be adopted in future to ensure the reading of those papers that might be announced.

Mr. Costello then offered, should he not have published his remarks on catheterism and his new instrument for that operation previous to our next meeting, to bring them forward at the commencement of the ensuing session.

The President then adjourned the meetings until the third Saturday in October, on which evening the nomination of the officers takes place.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

A FEW days since we paid a visit to this Hospital, where we learned that experiments were making with an ointment, the formula of which we shall subjoin, in the treatment of conjunctival inflammation, albugo, &c. The ointment is made by rubbing up a drachm of the dregs of black wash with an ounce of lard.

* The full particulars of Mr. Greenwood's case we are compelled to omit, having exceeded considerably our limits.

It is applied between the eyelids in the same manner as the black ointment, and in nearly the same quantity: it proves to be a stimulant, and may serve to add one more to the list of such external applications; no slight advantage, for cases not unfrequently occur, when it is absolutely imperative and positively necessary, more especially in chronic cases, to vary the nature of the application, as the organ becomes accustomed to the stimulus previously employed.

**THE
London Medical and Surgical Journal.**

Saturday, June 13, 1835.

**THE POOR LAWS COMMISSIONERS,
AND THEIR SATELLITES, *versus*
THE MEDICAL PROFESSION.**

THE current of letters flowing in upon us is still on the increase regarding the degrading operation of the Poor Laws Commissioners upon the interests of our profession; from every quarter of the kingdom, with a very few distant exceptions, the cry of disapprobation is echoed. The forbearance of our medical brethren seems at last to have been too heavily taxed, and the re-action which should have long ago appeared, has at length raised its head, and the only body which has perhaps hitherto never stood on its self defence publicly, is about to show a front to its various enemies.

Without doubt, among the foremost and most insulting of the foes of medical respectability of the present day, may be reckoned the Poor Laws Commissioners and their stipendiary auxiliaries. These gentlemen, clothed in the authority with which an act of parliament (wise or unwise we will not here stop to inquire) has invested them, march through the country levelling not only the poor, but most of those, saving themselves, who come in contact with the pauper. The medical attendant on the poor, long the subject of oppression, and the victim of robbery among parish despots, seems at the pre-

sent juncture to be hurled lower still in the scale of their estimate, and we now advertise him, unless he have the good sense and spirit to emancipate himself, and burst with his own hands the trammels with which ignorance and unopposed impudence have up to this time bound him, he may languish on for an indefinite period in chains, the links of which, but for his own endurance, might be separated with a breath.

The numerous correspondents by whom we are addressed from every part of the country, leave us little reason to doubt but that a serious re-action is about to take place against the dicta of the "guardians" and their allies, respecting the remuneration offered by them to surgeons for attending the poor. It seems as if this additional piece of impudence emanating from *them*, was alone wanting to complete the series of impositions under which the medical body could not any longer patiently succumb. Simultaneous with its perpetration, the spirit of resistance has reared its crest and assumed that aspect which we hope and trust (and we believe ourselves not too sanguine) will before long fright back into "its propriety" the meagre demon of parsimony and mock economy, which has, for nearly a hundred years, bearded our profession. Associations—combinations of intellect, by which the timid shall feel assurance and the strong nerved redoubled confidence—have commenced. An engine which has hitherto been both slighted and unused by our professional brethren, is springing into existence among them, and it now remains for them only to continue its motion and direct its action. The principle of combination which has been adopted from time immemorial by other scientific bodies, has, "*post longam moram*," found its way into the heart of the medical profession, and by its tem-

perate use and discreet application we hope to see a new era arise—a day of resurrection from the night of evil with which our own inadvertence and the consequent contempt of our lay fellow subjects have environed us. The forming of associations among individuals professing the same opinions, or cultivating the same science, is of the utmost importance to their advancement, more especially in a state of society, the compages of which are so numerous and diversified as those which constitute the social relations of the British empire. Individual strength and moderate intellect acting by themselves, may not attract observation or command attention when the universal strife is for rank and distinction; but when the forces are collected, when intellect joins intellect, and the weaker is upheld by the stronger, the aggregate will always be able to accomplish that which, "taken single-handed, would have been a failure."

Guided by this conviction, then, we exhort again every practitioner throughout the kingdom to enrol himself a member of some association which shall have for its object the amelioration and advancement of his profession. We tell him that by so doing he will be only adopting one of the distinguishing features characteristic of the present era—the "*system of co-operation*," which has extended itself, more or less, into every ramification of business—into every active pursuit. Let, then, our brethren, we say, assemble together, and, blending their acquirements and energies into one common mass, attempt to throw off that yoke which a base subservience alone has hitherto imposed upon them—a culpable negligence on their own parts only permitted to crush them into insignificance, —an insignificance, how degrading and

intolerable when felt to be so little deserved! How galling, when known to be presumed upon by that very class of society which ought to have known our merits better—who from a kindred station in life should be supposed to have some sympathy for us who are every day, nay, every hour, crossing their path and communing with them, aye, and conferring benefits upon them, for which we *may expect* but do not often *receive* an equivalent.

As a sample of the mode in which the Boards of Guardians act in some districts we may lay the following before our readers. In our last number we narrated their liberal offer of a couple of shillings per case of illness. There was no juggling in *that*. Bare-faced impudence and arrogance, combined with niggard save-all misnamed economy, presided at the board which ventured upon *that splendid tender*; but in the case we are going to relate there is some of what *Katerfelto* used to denominate hocus-pocus.

A Committee of "GUARDIANS," convened not thirty miles from the metropolis, having laid down the absurd principle that those who had held the parishes before were the most proper persons to hold them again, intended to propose a measure to the Board which would altogether exclude three practitioners; and this proposal was, after some discussion, agreed to. Now the reason why the *excluded* had not the medical care of the district in question entrusted to them during the last year, was because their offer to undertake that duty happened to be higher than that of a trio of gentlemen who were their opponents. *These*, in order, we suppose, to enhance the *respectability* of the profession, offering *their* services absolutely for what we must be allowed to suppose was their real value—

nothing! The Select Committee appointed to reappoint these medical representatives of the valueless boundary between plus and minus were "managed to be brought in" in a very neat but bare-faced manner. A "GUARDIAN," whose bias towards the men of nothing was well known, was proposed by another "GUARDIAN" to nominate the members of the Select Committee. The invoked Daniel, clad in his brief authority, advanced to judgment, and, lo! pulled out of his pocket what showed the whole to be a preconceived affair, a piece of paste-board, on which were written, and from which he read, the names of none but such as were favourable to the undercutting trio, and hostile to the men who dared to ask a trifle for their services. We need scarcely put it to our readers, whether the fact of a medical man, tendering his services for *nothing*, proves him the most efficient and proper person to attend a parish, or *vice versa*.

We ought, as lovers of truth, also to add, that the Select Committee above blazoned, allowed their report to be altered in consequence of letters signed by, and purporting to be an expression of the wishes of, the inhabitants of certain parishes, that this or that individual might be appointed as their medical attendant, but which were, in reality, got up by those *medical nothing-men themselves*, for the avowed purpose of excluding the men who thought themselves worth something. Faugh! such an exhibition of paltry meanness needs no comments from us. Such a packing of friendships and personal considerations, in order to give a semblance of adhering to principle while the worst violation of it took place, is almost beneath our contempt; and, were not its effects oppressive and mischievous to the poor, in an immeasurable degree, we

know not that we should have taken the trouble to expose such a tissue of scurvy manœuvring.

No doubt the Board of Guardians at large, as well as its Select Committee, have, by thus acting, consented to become parties to these hole-and-corner proceedings, and lent themselves to a system of jobbing, partiality, and favouritism, hitherto unparalleled by any body of men acting in a public capacity. They have acted in a manner discreditable to themselves, injurious to the poor under their control, and prejudicial to the general interests of our profession; and, unless such conduct be timely repelled, and their love of cheap surgery checked, it is not easy to foresee to what new lengths they may proceed. The only effective mode of combating so much of the monstrous power confided to the Poor-Laws Commissioners as is brought to bear against our profession, is for us to unite in mutual defence, and form associations throughout the kingdom, which shall be able to vindicate our respectability, and secure our just rights. Until this be effected there will be no remedy for the host of impositions daily directed against us. Let union, then, be henceforth the aim of every practitioner who would escape from the contumelious treatment endured up to the present moment almost in silence by the medical body.

it must be granted that in this, at least, they have displayed but a contemptible share of it. Verily they have sold their independence for a mess of pottage, a trifle which, if they happen to be house-keepers, will, we predict, at the year's end, be found hardly sufficient to answer the demand of the poor-rate gatherer. We wish them joy of their occupation, and as many cases as their hearts can desire. Nevertheless, we shall not relax in our endeavours to amend their lot, or allow the pen to drop from our fingers while we behold them drudging and starving at this rate. Let them keep the portion of courage they possess on the alert, and a better prospect and more pay shall at no distant period betide them.

NEW SCHOOL OF ANATOMY, SURGERY, AND MEDICINE.

We understand that in consequence of a new School of Anatomy having been built at Knightsbridge, under the auspices of Sir B. C. Brodie, it is the intention of Dr. Wilson and Mr. Lane materially to increase their present school in Grosvenor-place, and to have lectures delivered there during the ensuing session (1835-36) on every branch of professional study. We believe the following arrangements have been already made:

Anatomy, Physiology, and Pathology, by Dr. Wilson, Physician to St. George's Hospital, and Mr. Lane.

Anatomical Demonstrations and Dissections by Mr. Lane and Mr. Harrison.

Surgery, by Mr. Liston, Surgeon to the North London Hospital, and Mr. Walker, Surg. to the Lock Hospital, and Sen. Assist.-Surgeon to St. George's Hospital.

Theory and Practice of Physic, by Dr. Stevens and Dr. Wilson.

Materia Medica and Therapeutics, by Dr. Wood and Mr. Ansell.

Midwifery and the Diseases of Women and Children, by Mr. Stone and Dr. Henry Davis.

Botany, by Mr. Hayes.

Medical Jurisprudence, by Mr. Broughton and Millcock, Barrister at Law.

THE VICTIMS OF THE TWO-SHILLING RATE.

We are sorry to learn that many medical men in the districts where the two and three-shilling rate was offered have accepted the terms, and consented to toil for the hungry mite. Whatever their degree of spirit may be in other instances,

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British Hospital Report.

NORTH LONDON HOSPITAL.

Clinical Remarks on Stuttering, Rheumatism, Pericarditis, and Bronchitis.

BY PROFESSOR ELLIOTSON.

GENTLEMEN,—You will recollect some weeks since a little boy being brought to the hospital, who stuttered considerably; I then told you that he was to be put under a new treatment, which is, by placing a new instrument under the arch of the tongue, so as to support firmly the muscles of that organ. The instrument which I then showed you I told you appeared to me likely to be productive of much benefit, only, however, in those cases where the defect arises from debility of the organ itself, or, in other words, of the muscles supporting the organ. But if the cause be seated in the air passages, which frequently is the case, then of course the support gained by the use of the instrument could not be beneficial. I understand from Mr. Metz, who is the inventor of this instrument, and under whose care the little boy has been placed, that the child has derived much benefit from its use. He would have brought him with him for you to have judged for yourselves to day, but he tells me that the boy, until the last week or two, has not been submitted to its action. It appears to me that this mechanical contrivance may prove of the greatest benefit; the support it gives will steady the action of the tongue, and thus allow the person affected by such debility a certain controul over the organ, exactly in the same way that we have controul over our leg when we put the whole surface of the foot upon the ground; for we know that when we rest our leg upon the toes, much agitation of the limb is produced, and we cannot quiet it, until we support the whole of it upon the sole of the foot. It is exactly on the same principle that I presume Metz's instrument will be productive of benefit in many cases of stuttering. He has brought with him to-day another youth similarly affected. I will endeavour to make him read a few words to you, so that when you see him hereafter, you will be able to judge of the progress he has made from the use of this new invention. (M. Metz promised to bring him again in the course of a month; the boy could not utter a word distinctly.)

Rheumatism, Pericarditis, Bronchitis.

The case that I wish to make a few remarks upon to-day, is one which you have just had the opportunity of witnessing the post-mortem in order, we supposed, was a case of rheumatism, April, occurring in a respectability of the profession constitution had services absolutely for whom getting very allowed to suppose was their top clothes.

This is one of the most frequent causes of the acute rheumatism that we have in the hospitals. At the time of his admission he was suffering from pains, increased by warmth, about his limbs; his joints were much swollen; there were heat, redness, and a degree of tenseness about these parts; his pulse was full and strong; tongue coated with whitish mucus. I ordered him to be bled, and gave him mercury. The pains became relieved, the redness, heat, and swelling disappeared, and he was going on tolerably well. From a constant depression of spirits, brought on from some family affair, he continued weak and much exhausted. In a short time violent palpitation supervened, the pains, though not so violent, returned about his limbs; he complained of pains darting backwards towards the scapulae, pains passing from the region of the heart down towards his elbow. This latter, together with some other diagnostic marks, caused me to infer the existence of pericarditis. I know that it is stated by many, that for a certainty pericarditis cannot be detected during life. Andral is also of this opinion. Certainly I cannot say that I have found any more difficulty in detecting the existence of this disease, than that of any other. I have been in the habit, now, for some years, of pointing out the means of ascertaining this disease, in my lectures, and I cannot say that I have found much difficulty about the matter. The pain that this man complained of darting to the elbow is extremely curious, though not very uncommon. In many cases that I have seen I have observed patients complain of the pain shooting down the arm, frequently not going further than the elbow joint, at other times passing this joint, and then traversing the fore-arm, and stopping at the wrist joint. More frequently, I may say, the pain stops at the elbow joint than the wrist joint; but it is curious, that in pericarditis the pain should cease suddenly at these joints. This pain, however, by no means always accompanies this disease, therefore, by itself, it would not be a sufficient diagnostic mark for its detection. But the most certain method that I know of, is by pressing between those intercostal spaces where the apex of the heart beats, and if the disease exists, there is, in most cases, much pain produced. I also, at the same time, put my hand under the cartilages of the true ribs, and push the diaphragm upwards towards the apex of the heart, and if the pericardium is the seat of inflammation, the patient will complain of much pain from this pressure.

When Andral speaks of the non-existence of this disease he does not make mention of this process of discovering it, therefore we may infer that he did not have recourse to it. If by such pressure you produce pain, there is much palpitation, pains shooting backwards towards the scapulae, and, at the same time the patient complains of pains passing from the region of the heart down the left arm, you

may be certain that pericarditis is the consequence.

Well, this man complained of pains down his arm; there was much tenderness from pressing the diaphragm against the apex of the heart, and from pressing between the intercostal spaces. The palpitation was violent, and still rheumatic pains existed about his body. I again bled him, and prescribed for him mercury. A few days afterwards, by auscultation, a sound like the bellows sound was distinctly heard at the apex of the heart. When I first heard this, I felt convinced that it was produced from a deposition of lymph between the pericardium and the heart, generally, when the bellows-sound is at the apex of the heart, it is produced from this cause. Laennec, to whom we were first indebted for the detection of diseases of the chest by the stethoscope, speaks of a creaking noise, produced by the constant rubbing of the pleura-pulmonalis with the pleura-costalis, when these membranes, from chronic inflammation, are thickened, and there is a deposition of lymph between them. Now, this creaking noise, which Laennec speaks of, frequently more resembles that of the bellows-sound. Thus if from this cause a bellows-sound may be produced by the pleura, there is no reason why the same sound should not be produced by the constant friction of the pericardium against the apex of the heart, and in this instance it certainly was the case, as verified by the autopsy. This bellows-sound might exist and yet the person be comparatively in good health. I know several gentlemen at the present time who have a constant bruit, but yet live and enjoy excellent health, without suffering any inconvenience. The man who was the subject of the disease in question, suddenly expired yesterday. He had become relieved from his pericarditis; the pains had left him, and he was apparently going on remarkably well. He had taken mercury, and his mouth had become tender, in consequence of which the mercury had been omitted. The cause of his sudden death I am perfectly ignorant of, but we often see persons, who from repeated attacks of disease, have been so much reduced, that when apparently recovering from the attack and going on well for two or three days, suddenly expire. The same thing we observe in people who have fasted for a long time, and then who, partaking heartily of food, go on, gain strength, and do well for a few days, and afterwards suddenly cease to exist. The only chance that I should have had to save the life of this person would have been to have pushed the mercury further; but I confess I was fearful of doing this, though I am now sorry that I did not. I am quite sure that more lives are saved in inflammatory diseases by carrying mercury to a great extent, than by merely having recourse to it for the simple production of ptyalism. Many medical men will say, when a patient gets well, and the

mouth has been made very sore, that he would have equally got well, if tenderness of the gums had *only* been produced. Certainly when a man gets well, it is impossible to say whether he would or would not have got well, had a more mild exhibition of mercury been adopted. But I am quite satisfied that if medical men draw their inferences rationally—that is, by facts—they would find that, out of a certain number of cases, more got well after a free exhibition of mercury; indeed, after they had suffered from a great soreness of the mouth, than after it had been exhibited only to produce simple soreness of the gums; and this I have proved from repeated observation in practice. With regard to the post mortem appearances, you may observe that the pericardium had to a great extent adhered to the heart; but at its apex you will perceive the adhesion had not taken place. There is deposited between the apex and the pericardium lymph, which you here see (showing the heart), and this undoubtedly was the cause of the morbid sound, resembling the bellows sound, being produced. The substance of the heart itself was healthy, and the state of the valves were such as not to impede the progress of the blood through them, consequently the bellows sound heard must have been produced from the deposition of lymph between the pericardium and the apex of the heart. The appearance of the lungs indicated the existence of bronchitis, which, from auscultation previous to death, was ascertained to be the case. By my squeezing the anterior lobes, you perceive a quantity of muco-purulent matter escaping. The posterior lobes are somewhat indurated, and in a state of great congestion. This may be owing in part to the position in which the body was laid since death.

EFFECTS OF CLIMATE ON TYPHUS.

CLIMATE which exercises so marked an influence on the predisposition to typhus fever, appears to possess a very slight one as to its severity and mortality.

Out of ninety patients, of whom notes were made relative to this particular, it was found that of twenty-four, whose residence in Paris had been only six months, nine died; of forty, who had resided in Paris from six months to two years, twelve died; of fifteen, who had lived at Paris from two to six years, five died; and of eleven, who had been resident in Paris upwards of six years, three were destroyed by the disorder.

There is here a slight difference in favour of those whose acclimating appeared to be further advanced, but it is so slight that it would scarcely have deserved notice were it not in accordance with the results obtained by M. L... had researches, made on greater numbers, alone lead to more... from headach, ... of the temporal;

MISCELLANEOUS.

The *Moscow Gazette* contains an official invitation to professors, native and foreign, to become candidates for the vacant Chair of Veterinary Medicine and Surgery in the Medico-Chirurgical Institute of the University of Wilna. The annual salary is 5,000 roubles, which, after ten years' service, is increased to 5,500 roubles. After twenty-five years of irreproachable service, the professor is at liberty to retire on full salary, which he is permitted to enjoy, even in a foreign country, with the title of Emeritus Professor.

The Dutch government have established a botanic garden at Dogima, in Japan; and it is reported that there are already one thousand plants, collected principally from the Japanese Isles and China. Dr. Siebold delivers lectures on botany, which are eagerly followed by the natives, some of whom are not contemptible botanists.—**Brand's Pharm. Lect. 1835.**

The Bill for the Incorporation of the Metropolitan Soft Water Company was lost on the second reading in the House of Commons on the 5th inst. by a majority of seventy-four. The principal objections urged were, that it would prove a destructive monopoly, and that it would soon exhaust all the land-springs, and it was stated as a fact that the wells of London had sunk considerably of late years.

A Secret of Longevity.—Admiration and light contemplation are very powerful to the prolonging of life, for they hold the spirits in such things as delight them, and suffer them not to tumultuate or to carry themselves quietly and waywardly. And therefore all the contemplators of natural things which had so many and so eminent objects to admire, as Democritus, Plato, Parmenides, Apollonius, were long-lived; also rhetoricians which tasted but lightly of things, and studied rather exornation of speech than profundity of matter, were long-lived, as Gorgias, Protagoras, Isocrates, Seneca, and certainly, as all men are, for the most part, talkative, so talkative men do often grow old; for it shows a light contemplation, and such as does not strain the spirits, or vex them. But subtil, and acute, and eager inquisition shorten life; for they tire the spirit, and wasteth it.—*Bacon's History of Life and Death.*

A mule was produced from Lord Clive's female zebra, a male ass was frequently put to her, but she always maddened with indignation. At length some one suggested the idea of painting the ass; so said, so done, the ass was painted in a masterly manner, and the masqueraded lover absolutely gained his point without difficulty. She was fecundated, the offspring was a true mule, but streaked finely zebra-fashioered. To this we may add the following fact:—A blood mare, the property of Lord Morton, was fecundated by a quagga, a streaked animal, about the size of an ass, common in southern Africa. For five subsequent seasons a black horse was admitted to the mare, and although she had no other interview with the quagga, each of the foals was striped with the colours of that animal, and, what is more remarkable, the fifth more than the fourth. Drawings of the mare, the quagga, and the progeny may be seen in the Council-room of the College of Surgeons.

Dr. Blundell, we observe, agrees with Monbodo in supposing men so far to resemble monkeys and the devil. They say he has a tail—as to have formerly had that honourable appendix to the *us euecycyis*. The devil, in the verses which Porson was not ashamed to own, but which Coleridge and Southey wrote, was described, we think, as wandering about the earth in—
"A coat of red, and breeches blue,

...hole behind for his tail to peep through."
...ans, we misquote the lines, and have services absor...our of his highness' clothes.
...tainly preserved—"his tail allowed to suppose was ever, has been shorn

of his caudal honour, and, according to common report, several rats in a certain building in Westminster exhibit the same melancholy mutilation—"rats without a tail!" It were a pity indeed that the human species should be the only sufferers.

WEEKLY BILL OF MORTALITY.

London, Tuesday, June 9, 1835.

Abscess	3	Fistula	1
Age and Debility	31	Gout	4
Apoplexy	5	Heart, Diseased	2
Asthma	6	Hooping-Cough	14
Cancer	1	Inflammation	19
Childbirth	6	Inflammation of the Bowels & Stomach	4
Cholera	1	Inflammation of the Brain	5
Consumption	67	Inflammation of the Lungs and Pleura	5
Constipation of the Bowels	3	Insanity	3
Convulsions	20	Liver, Diseased	1
Croup	2	Measles	17
Dentition, or Teething	1	Paralysis	2
Dropsy	14	Small Pox	14
Dropsy on the Brain	7	Sore Throat & Quinsey	1
Dropsy on the Chest	1	Spasms	3
Dysentery	3	Unknown Causes	10
Erysipelas	1		
Fever	8		
Fever, Scarlet	4	Stillborn	18

Buried, Males 160 Females 153 Total 313

Increase in Burials reported this week, 85.

CORRESPONDENTS.

Sigma.—We believe Butler's lines which he refers to, are the following; and no doubt, as Sigma observes, they are very applicable to the knavish nostrums which are now every day advertised—

Stored with delectory *med'cines*,
Which whosoever took is *dead since*.

Guy's Hospital.—We have received several accounts of the prizes delivered at the School, and not one corresponds with the other; therefore we shall leave them as we first inserted them.

"*Originalis.*"—We cry him mercy. It is true we at a rough guess supposed the Milesian Hippocrates might sell somewhere about a hundred of his pamphlets per week; but, upon further enquiry, we feel satisfied that our worthy correspondent "*Originalis*" is correct in his assumption that *twenty* alone are gotten rid of in the way of trade; the remainder of our Milesian's hebdomadal quota being *given* away to such as think them *worth* carrying off.

"*An Army Surgeon*" will see in the Extraordinary Gazette of Thursday last that permission is given to the Agents of the Queen of Spain to raise a force of 10,000 men in this country. Of course surgeons will be in request; and those who have already served will have the preference. Application should be made to the Spanish embassy on the subject.

"*X. Z.*"—His indentures will stand.

"*Glaucus.*"—Hippocrates was a scientific Greek physician; he was not a native of Ireland, nor did he, so far as we can learn, indite any periodical. The spurious Hippocrates whom "*Originalis*" castigates is an Emeraldar.

"*Pestis.*"—We believe that the Asiatic Cholera is not contagious. Our opinions stand recorded on that subject.

"*Index.*"—The prisoner Williams, who was condemned to suffer death on Tuesday last, for violating a child of tender years, has not been respited upon the strength of Mr. Leeson's representations, but upon other considerations which will be quickly before the public.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

London Medical and Surgical Journal.

No. 177.

SATURDAY, JUNE 20, 1835.

VOL. VII.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At the Meath Hospital during the Session of 1834-5.

LECTURE XVI.

GENTLEMEN,—It is my intention in this day's lecture to refer briefly to some cases worthy of your attention; I shall not dwell long on them, as I wish merely to point them out that you may observe them more accurately.

In the first place, there is a man, named Vero, in the Fever Ward, whose case I beg you will study with attention. He applied for admission here some time ago, labouring under violent and general bronchitis, accompanied with high inflammatory fever; we took him in at the time, as his case was one of the most urgent danger, but were obliged by the crowded state of the hospital to put him into the large Fever Ward. It is unnecessary for me to detail the treatment employed, as you have all witnessed it. By the most energetic measures we succeeded in arresting the disease, but his convalescence was rendered tedious in consequence of his having been suddenly affected by a small quantity of mercury. His mouth became very sore, his breath fetid, his gums spongy, the inside of his lips covered with lymph, and his system exhibited all the marks of mercurial irritation; but, under the care of Mr. Grady, a gradual but decided improvement in his condition was going on, and he was advancing rapidly in convalescence, when, unluckily for himself, he was persuaded to leave the hospital for the sake of voting at the city of Dublin election. In doing this he was necessarily much fatigued, and was exposed to cold on returning from the heated booth. Now, mark the consequences of this indiscretion. This man just arrived at the period of convalescence from a severe and dangerous inflammatory fever, and greatly debilitated both by the disease and the venesections, and other remedies necessarily employed, improvidently exposes himself while

his frame was still emaciated and weak, and while his mouth was still sore in consequence of severe mercurial salivation; in this condition he exposes himself to the operation of mental excitement, great bodily fatigue, and cold,—and what have been the consequences? Why, that a new attack of fever immediately struck him to the ground with a heavy hand, and, after an absence of ten days, he returned to the hospital on the 24th of January, complaining of rigors, and other symptoms indicative of commencing fever. We saw him next morning, that is, before this new fever had lasted twenty-four hours, and we found him affected in a most remarkable manner; we found him labouring under a number of severe symptoms, which would have led the most experienced, if asked to guess how long his fever had already lasted, into the commission of a gross error, for he would answer that it must be at least the eleventh day. It is, indeed, very rare to find fever at once commencing with symptoms such as we observed on the first day in Vero. Great prostration of strength, hot skin, dry tongue, pulse 108, nervous agitation, restlessness, together with *subsultus tendinum*, were present from the very commencement. The *subsultus* was very remarkable, and increased to such a degree, even on the second day, that Mr. Grady found it very difficult to count the pulse at the wrist; and yet, though his muscular system was thus irregularly excited, and its nervous influence deranged, he had not even a tendency to delirium, and he slept soundly! neither had he the least headach!

I called your attention, gentlemen, to this circumstance at the bedside of this patient, and I endeavoured to impress strongly on your minds how forcibly this case opposes the doctrines of those who attribute all the nervous disturbance of every part of the system, and among the rest *subsultus*, to congestion or to inflammation of the brain. When the *subsultus* had attained a degree of violence in Vero's case, such as we seldom witness, we remarked, nevertheless, that he slept well, had a clear eye without the least approach to suffusion, and that he was free from headach, heat of scalp, or throbbing of the temporal

arteries. Neither were we able to detect the slightest indication of inflammation, or even of congestion, in the chest or abdomen. The breathing was indeed quickened, but only in proportion to the acceleration of the pulse, and there was no cough or thoracic pain or uneasiness. The belly was fallen, soft, and quite free from tenderness, and there were no griping pains, flatulence, nausea, or diarrhœa, and yet the patient was evidently very dangerously ill. Agitated with subsultus, he was in a constant state of restlessness when awake; his skin was hot, his tongue dry, and his weakness was sudden and excessive; in short, he was labouring under intense *nervous fever*. This is a rare form of disease, and one the very existence of which most modern pathologists have been in the habit of denying; but, as I told you in a former lecture, I have seen several examples of it.

I may remark, gentlemen, that in the present epidemic fever the termination of the disease by a well-marked crisis never occurs. Now, in the epidemic fever of which I have spoken in a former lecture, and which committed such devastations in 1827, a crisis was observable in the majority of the cases, and was almost always preceded by rigors and a hot fit, attended for a few hours with marked exacerbation of the symptoms, and followed by a most profuse, warm, general, perspiration, bringing perfect relief, and often so excessive that the steam of it could be seen issuing forth in vapour through the blankets in which the patient lay wrapped! In the beginning of the epidemic, the critical rigor often took place on the fifth day, and oftener on the seventh, but, as the disease continued, these short fevers, which, by the bye, always left the patients very liable to relapse, entirely disappeared; and when the epidemic reached its acmé, the crisis rarely took place so early as on the eleventh day, and most generally on the fourteenth or seventeenth day.

You perceive, gentlemen, that in judging of the truth of the doctrines held by the ancients concerning the existence of critical days in fevers, an observer of the present epidemic might be led into error, and might, by generalising too hastily, arrive at the false conclusion, that this doctrine of critical days is totally destitute of foundation. But to return to our patient Vero. It is not very difficult to explain why, in him, the moment fever was excited it assumed the nervous type. He had been debilitated by severe inflammatory fever and by active antiphlogistic treatment, and, above all, his nervous system had been severely tried by an unexpected mercurial salivation brought on by an unusually small quantity of calomel.

You are aware, gentlemen, that various nervous symptoms attended with irregular muscular action, and simulating chorea or paralysis agitans, are frequently the result of metallic salts, whether lead or mercury. For this reason I look upon the previous mercu-

rialisation as the chief cause of the nervous type of Vero's fever. In spite of all our efforts he died exhausted on the tenth day.

Let me now refer you briefly to the case of Catherine M'Donnel. This girl is labouring under an attack of chorea of considerable standing, and is at present about fourteen years of age. I mention this because it is not improbable that the appearance of the catamenia, which frequently come on about this period, may have some influence on the future progress of her complaint. She states that her disease commenced about seven years ago, and that ever since she has been subject to its attacks at various times. Her health is somewhat impaired, but not, however, to such a degree as to prevent her from following her usual avocations. Her present attack commenced about three weeks ago.

It is unnecessary for me to enter into any description of the convulsive motions of the limbs, and other symptoms which characterise chorea; neither is it my intention to enter into the general history of the disease; you will find an admirable account of its symptoms, pathology, and treatment, in Copland's Dictionary. I shall merely remark, with reference to this case, that there is no headach, and an accurate examination has failed in detecting any symptoms of determination to the head. Neither have we derangement of muscular motion during sleep; the girl's sleep is tranquil and regular. There is no evidence of gastric derangement present. She relishes her food, and, what is rather singular, her appetite is better during the attacks than during the intervals. Her tongue is clean and moist, but her bowels are inclined to constipation. It is of importance to bear in mind here, that her symptoms do not appear to have any connection with cerebral or gastric derangement. She has no headach, flushing of the face, noise in the ears, or throbbing of the temporal arteries, and there is nothing but constipation to show that the digestive organs are out of order. I dwell on these two circumstances particularly, because some persons have attributed chorea to cerebral irritation, and others to indigestion and gastric derangement exclusively. I am quite ready to grant that it may be produced occasionally by either of these two causes, and that the presence of either will tend to aggravate it, but am inclined to look on chorea as chiefly a nervous disease, and to be cured chiefly by nervous medicines. Dr. Copland's remarks upon this question are excellent, and deserve to be attentively studied. For my own part I think that in this, as in many chronic diseases where indigestion exists, it is often a consequence, not a cause, and is produced by debility of the vital powers of the stomach and intestines, organs which are affected by causes acting on the whole organisation. Thus a too rapid growth, premature or unnatural sexual indulgence, confinement, want of exercise, of rest, care and anxiety, &c., may each occasion a

weak state of every organ of the body, including debility of the stomach. In a girl of this age, who labours under constipation, it is always proper to commence with the use of purgatives, and I have accordingly ordered her some pills composed of aloes and capsicum; but I would not persevere in the purgative plan longer than was necessary for removing constipation. What I mainly depend on for removing the disease is tonics, one of the best of which is the carbonate of iron in doses of half a drachm four times a day. There is at present a controversy between Dr. Billing and Dr. Johnston with respect to the doses of carbonate of iron to be employed in this disease, and it is asserted that in cases where doses of half a drachm three or four times a day will not succeed, a cure may be effected by giving three, four, or even five drachms frequently in the day. With regard to this subject, I must confess that I am for moderate doses, and I think in general as much good may be accomplished by half a drachm or a drachm, three or four times a-day, as by much larger doses. I have accordingly ordered this girl to take half a drachm four times a day, and will persevere in the use of this remedy until we have given it a fair trial. The carbonate of iron tends in general rather to produce a relaxed than a constipated state of the bowels, and consequently is peculiarly well adapted to chronic cases of debility. The *mistura ferri aromatica* in moderate doses is another excellent formula. When we have to deal with constitutional weakness, which has arisen gradually, and continued long, we must trust more to the operation of general physical influences than to medicine, and, in graduating the doses of tonics, we must remember that it is impossible in such cases suddenly to strengthen; we must therefore rely upon the gradual operation of tonics, given for a long continuance and in moderate doses. This rule should never be lost sight of in the treatment of chronic diseases; important as it is, most practitioners seem little influenced by it, or perhaps they are altogether ignorant of it, otherwise we should not see them using concentrated and powerful tonics in such large and repeated doses in chorea. Another general rule as to the use of tonics in chronic diseases; usually you will be more successful with mild and diluted than with powerful and concentrated medicines. Thus, for example, cinchona in powder is often preferable to sulphate of quinine in chronic diseases.

There is a very curious case of paralysis agitans at present in the female chronic ward, which claims a few remarks. You must have all remarked the patient Ellen Davis, a young woman about twenty-five years of age. She has a most peculiar expression of countenance, and, as her disease is rather a rare one, I beg that any gentleman who has not seen it will take the opportunity of paying her a visit. According to the account which she gives of herself, the disease appears to have originated

in a sudden and violent mental emotion. The poor girl, like most of the lower class of country people, happens to be a firm believer in the existence of ghosts and such like non-entities, and this superstition has formed the source or exciting cause of the disease in question. She was, unfortunately for herself, located in a very uncomfortable situation, her house being close to a road between two churchyards, a complete thoroughfare for ghosts, and where figures of a very questionable description had been frequently seen by many of her neighbours. Some of her acquaintances, who were aware of the frightful notions she entertained about personages of this kind, resolved to amuse themselves at her expense, and played off a practical joke of a very cruel nature. A churn-dash was procured, to which a sheet was appended, so as to form no unapt representation of a sheeted headless corpse, and this was dangled between two trees by means of a rope. The poor girl, who happened to be going to bed at the time, was utterly appalled by the sight of what she conceived to be one of these ghosts sweeping through the air, and immediately dropped down in a state of total insensibility. The fright deranged her nervous functions in an extraordinary degree, she became vertiginous, lost the use of her limbs on one side, and took to bed, from which she states she did not get up for three months.

The history of this case is of course extremely uncertain. In chronic cases, and among patients in her class of life, you can seldom expect to get an accurate or satisfactory account. It is quite clear that she had hemiplegia, but whether it arose from the fright or not we cannot exactly say. The symptoms of hemiplegia after some time began to decline, and she gradually regained the power of walking. This, however, is but feeble, and though it is now seven years since the occurrence of the attack, the muscular power of the limbs is very slight. She had also, during the progress of her complaint, an attack of amaurosis, which she says deprived her entirely of sight for nearly a year, and that after this period she recovered the use of one eye completely, but the other still remains amaurotic, and she can distinguish objects with it very imperfectly. At present she affords a very remarkable specimen of paralysis agitans. She cannot walk slowly, and when she has commenced walking she cannot stop without considerable difficulty. The muscles of the extremities, face, and tongue, are very little under her controul, and are in a state of almost perpetual motion. The muscles of the eyelids and eyeballs are also similarly affected, and this gives to her countenance a strange and peculiar expression. You will find an excellent description of this disease in Dr. Elliotson's lectures; a very interesting case is also detailed in Dr. Wm. Stokes's lectures, published in *Renshaw's London Medical and Surgical Journal*.

It would appear that in this disease the muscles are not by any means beyond the controul of the will, but they are so influenced by the operation of some other unknown cause, that their motions are more or less imperfect and inadequate. She can walk quickly with tolerable ease, for in walking quickly the muscles are contracted more rapidly, and the will more strongly exercised, so that the obstacles to regular motion are in a great measure overcome, but when she walks slowly, time is given for the cause, which produces the anomalous motions, to come into play, a spasmodic state is established, and the muscles cease to obey the will so implicitly. I knew a gentleman who had a very curious form of this paralysis agitans. When about to walk, he was obliged to have himself balanced, and set off by some other person, just like a piece of machinery. When once set agoing, and on a smooth road, he went on very well for a considerable time, but if interrupted by a hill, or by the unevenness of the ground, he was compelled to run backwards in a right line until stopped by some one, and so little controul of his motions had he at this time, that if a pond or precipice lay behind him he could not prevent himself from tumbling over it. I have occasionally seen him under such circumstances, and the appearance he makes is singular and ludicrous. He goes backwards until he meets with a wall or some other object which resists his further progress. This is a very curious circumstance as connected with the nature of the disease.

I do not intend at present to enter into any inquiry respecting the nature and treatment of paralysis agitans. The prognosis of the disease appears to be, *à priori*, unfavourable, from the total want of any exciting cause which might be discovered and removed. If the disease consisted in congestion of the head or spine, or if there was any apparent lesion by the removal of which we could hope to effect some good, we might entertain a more favourable opinion with respect to its termination, but it unfortunately happens that in too many cases we can do nothing more than observe the curious phenomena which it presents.

Let me now direct your attention to the case of a man, named Murphy, in the chronic ward, who came in with bronchitis accompanied by anasarca. He had old bronchitic cough, copious expectoration, and orthopnoea; but he had no symptom of disease of the heart; his pulse was regular and rather slow, he had also albuminous and scanty urine, but without any fever, thirst, or nausea. The recent origin and sudden appearance of the disease induced me to look upon it as a case of acute dropsy, and I commenced the treatment by antiphlogistic measures, which, as you may have perceived, have been followed by remarkable benefit. What I wish to call your attention to particularly in this case, is the state of the patient's urine. On his admission,

we found that his urine was highly albuminous; when submitted to the action of heat at the temperature of 170° it coagulated rapidly, and showed distinct traces of the presence of a large quantity of albumen. Yet under the use of opium in moderate doses this man's urine became in two or three days perfectly free from every trace of albumen, and has continued so ever since.

Now this case alone would be a sufficient refutation of the opinions of those who look upon albuminous urine as a pathognomic sign of disease of the kidneys, as described by Dr. Bright, and who are in the habit of marking such cases in the hospital as cases of "Bright's Kidney." It appears rather strange, as in our case, that a man should have "Bright's Kidney" to-day, and not have it the next day. We have had a great many instances of this kind, and in various cases which came under treatment in this hospital, I have shown that this state of the urine may depend on mere functional disease of the kidney. Indeed nothing is more common than to meet albuminous urine in the dropsy which succeeds scarlatina, and yet most of the patients perfectly recover. I had lately an opportunity of examining the kidneys of a boy named William Young, who was admitted into Sir Patrick Dun's Hospital on the sixth day from the commencement of anasarca after scarlatina. This boy's urine had a specific gravity as high as 1027, and contained an enormous proportion of albumen. He died suddenly of convulsions the fourth day after his admission. His kidneys were in every respect healthy.

One word with respect to the diuretic remedies, which in this case I have employed with remarkable success. Having removed the acute symptoms by antiphlogistic treatment, I prescribed the following decoction:—

R. Decocti hordei, ℥j.,
Sacchari albi, ℥j.,
Nitratis potassæ, ℥ij.,
Acidi nitrici diluti, ℥j.,
Spiritus ætheris nitrosi, ℥j.—Two table-
spoonfuls to be taken every second
hour.

This is an excellent mixture, and well suited to the stage intermediate between the acute and chronic form of dropsy, where you wish to excite the action of the kidneys, and are afraid of stimulating the system generally. It has acted very favourably in the case before us, having increased the urinary discharge very considerably without producing any constitutional excitement.

There is a man at present in hospital labouring under diabetes; he furnishes one of the best examples of the disease you can meet, and I would recommend you to study his case with attention. He has got the notion that his complaint is one of no ordinary interest, and he comes occasionally to remain awhile in hospital and exhibit himself to the class. It is unnecessary for me to enter into any

general description of this affection; you will find a very satisfactory account of it in the *Cyclopædia of Practical Medicine*, and a shorter but equally valuable one in *Dr. Copland's Dictionary*. The most remarkable features of the disease are those connected with the change in the quality and quantity of the urine. With respect to the former, it is called *mellitus* when it contains a large proportion of sugar, and *insipidus* when it wants the saccharine taste, and presents nothing beyond a mere watery flavour. With regard to quantity, the change is very remarkable; the man who is at present in hospital passes eighteen pints in the course of twenty-four hours. In the normal state a man passes about two or three pints; this therefore must be considered as an enormous increase.

When you come to examine diabetic urine chemically, you find its specific gravity increased. Natural urine ranges from 1017 to 1020, diabetic from 1020 to 1050. Now in every pint of urine of the specific gravity of 1030, there is contained nearly an ounce and a half of solid animal matter. If you took a pint of this man's urine, and exposed it to a temperature of 170° on an evaporating dish until all the watery parts were dissipated, there would remain at least an ounce and a quarter of solid animal matter. Now if you multiply this by 18, it will give you more than a pound and a quarter of solid animal matter, which this man loses in the course of twenty-four hours by means of the kidneys alone. I need not tell you that this is a very considerable loss, and hence it is that the man naturally calls for large quantities of food to replace it. And such is the nature of diabetes in general: patients labouring under it have the activity of the digestive organs increased in proportion to the drain from their system; and were it not for this they would be rapidly run down by the emaciating effects of the disease. We notice this extraordinary activity of the digestive system in other diseases which have a tendency to produce emaciation; thus a patient recovering from long fever will frequently take and digest with facility quantities of food which produce repletion in a state of health.

In the case before us, one of the most remarkable things is the length of time the disease has lasted. The man has been now ill for more than three years; it is nearly twelve months since he was here before, and at that time he was just as bad as he is at present. He was relieved then, and went out of his own accord, and continued since nearly in the same state we found him at his last admission. He states that he has been ever since passing from twelve to twenty pints of urine in the day. He is, however, able to go about as usual, eats, drinks, and sleeps well, and, with the exception of the kidneys, all his functions appear to be natural; indeed, he appears to be exceedingly active and vigilant; he exercises a system of surveillance over the patients, nurses, and wardmaids, exposes all

their sins of omission and commission, and might be now and then a very useful kind of person in an hospital.

With respect to the state of his skin, I may observe that it is by no means so dry, acrid, and harsh as we frequently find in diabetic patients; indeed, it feels nearly natural, and is partially covered with moisture at various times of the day. Some persons, looking almost exclusively to the condition of the skin, have taken a very limited view of this disease. They consider it as arising from the perspiration being repressed and turned inwards on the kidneys. This, however, is by no means satisfactory. Some of the worst cases I have ever seen were accompanied by colliquative sweats. A gentleman came from the country last June to consult me for some affection of the digestive system; on inquiring into his case I found that he was in the habit of passing very large quantities of urine. I took some of it to my friend, Dr. Apjohn, to analyse, and it was found to be of the specific gravity of 1049. Now this gentleman had been subject to profuse perspirations, and used at that very time to sweat copiously every day. In the case above stated, the patient's breast and neck are frequently bedewed with perspiration. With respect to the opinions entertained concerning the nature of this disease, I beg leave to refer you to *Dr. Copland's Dictionary*; for my own part I can form no idea of it, except that it is a functional derangement of the secreting powers of the kidneys. I look upon all those hypotheses which have sought to account for diabetes by referring it to derangement of the digestive organs as useless and unsatisfactory; nor do I see why, in cases of disease, we are to look for all the matters secreted by the kidneys in the blood. It is true that there are but few of the matters secreted by any glands in a state of health which may not be discovered in the blood. All or most of the proximate principles of the matters secreted by the salivary glands, liver, and kidneys, are to be found in the blood during a state of health, but in disease the case is quite different. Diseased vessels or parts may assume the function of combining animal principles in proportions and modes that form results differing in their nature from anything usually to be found in the system. I confess I can see no difficulty in supposing that a substance so simple as sugar is may be formed from the elements of the blood, or that the vessels of the kidneys may in a state of disease take on a new action and secrete this substance with great rapidity. Sugar is one of those substances which are easily formed by nature, its elements are few and simple, and it may be formed with ease by beings belonging to the animal and vegetable kingdoms. From how many individuals of the vegetable class do we not procure it with facility? How often do we meet it as an animal secretion? Indeed, I have strong suspicions that a great many persons in so-

ciety, who labour under what is merely considered in the light of indigestion, are affected with diabetes. This was the case of the gentleman whose urine was of the remarkably high specific gravity of 1049. He still continues to pass a larger quantity of water than natural, but not near so much as formerly; its quality, however, has not improved so much as its quantity, and it still contains sugar. The state of health he enjoys is, with the aid of proper regimen and precautions, far from bad, and he is enabled to discharge effectively the numerous duties attached to the agency of an extensive estate in the County of Carlow. Dr. Marsh, who has paid much attention to this subject, attests the prevalence of chronic diabetes in a mild form. It is to be feared that many cases escape detection, because the quantity of water voided by the patient being but little increased, the idea of diabetes does not suggest itself to the mind of the physician. With regard to the quality of the urine, I may here remark, that diabetes may be divided into two sorts: the first includes those cases in which the quantity of urine is increased, but its specific gravity is less than natural; this comprises hysterical and nervous varieties of increased flow of water; the second, and to which indeed the term diabetes ought properly to be restricted, embraces those cases where the urine contains an animal principle either not naturally found in it or found in increased quantity. To this belong diabetes with sugar, with albumen, and with urea, viz.—diabetes mellitus, diabetes albuminosus, diabetes ureosus. The latter is by far less common than the other varieties. I have not myself met with an example, but it has been described by Dr. Bostock and others. The albuminous diabetes is often associated with dropsy, which latter attracts the chief attention of the physician. In some cases, however, the dropsical swellings are either very slight or altogether absent, while the urine is much increased in quantity, and highly loaded with albumen. A remark with respect to dropsy was suggested to me this morning by one of the cases in our chronic ward, and, lest I should pass it over hereafter, it may be as well to introduce it here. Dropsical effusion is in every instance produced by diseased action in the vascular system, and is the result of a morbidly affected secretion on the part of the extreme vessels. Now, like every other product of secretion, the effused fluid is liable to undergo great and sudden variations as to its quantity, variations produced by corresponding changes in the vascular or in the nervous system, which latter is so intimately associated with the function of secretion. This circumstance it is which occasions the swollen parts in anasarca to vary so continually in chronic cases of this disease, one part appearing more œdematous and again subsiding on the morrow. Now dropsical patients are morbidly attentive to every thing that passes, and are constantly dwelling on all the particulars which relate to

their swellings. In hearing their reports of themselves, you must not, therefore, allow yourselves to be misled, and you must never attribute any great importance to these local changes, which are too often merely temporary. But what I want to fix your attention on at the present is the fact, that the dropsical effusions to which internal organs are liable are subject to similar unaccountable changes, whether of increase or diminution, and that from day to day in some cases. Thus an anasarca patient will complain of having spent a wretched night, on account of cough and difficulty of breathing. You find his face, neck, and the integuments of the chest very œdematous; and, on examining his chest, great dulness is found in one lung, with moist crepitus; great œdema of that lung in fact exists. In a day or two after, and without any assignable reason, you find that the external œdema has much diminished, and that your patient, free from dyspnoea, has slept comfortably. You examine the chest, and you find a corresponding subsidence of the pulmonary infiltration. The same capricious increase or diminution is observed also in other secretions, as, for instance, in that of the bile.

I have lately examined with much attention the figured large and solid fecal evacuations of a jaundiced gentleman, and observed more than once that one portion of the fecal cylinder was quite brown and thoroughly impregnated with bile, while the remainder was perfectly destitute of it, and therefore was clay-coloured.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXVI.

Puerperal Convulsions.

GENTLEMEN,—At our last meeting I described to you that form of epileptic puerperal convulsions which arise from irritation produced by the presence of the child in utero, or from a state of irritation thus produced continuing after its birth. The other form of epileptic convulsions is of a totally different nature, it is the *epilepsia ex anæmia*, or epilepsy from loss of blood, and must be carefully distinguished from the species just described. Nor can it be said to deserve the name of puerperal convulsions, because the disease may be altogether independent of the pregnant and puerperal state. Nevertheless in no condition of the system is there such a liability of its occurrence as in this, because the patient is seldom or never exposed to the danger of such hæmorrhages at other times. "We know," says

Mr. Burns in his work on Uterine Hæmorrhage, "that when an animal is bled to death, convulsion generally terminates the scene. In some cases I have even known bleeding produce convulsions, but in such patients there was generally some symptom which previously indicated an irritable state of the head. The fits which succeed hæmorrhage are of the same kind with all these; we distinguish them by the pale visage, dead eye, and feeble pulse of the patient, we learn that the hæmorrhage has been profuse, and perhaps it is not yet checked. The rule, I apprehend, is to be very plain; the face is to be sprinkled with cold water, a free circulation of cool air procured, and some sp. ammon. arom. given in a little cinnamon water." "If the patient be not delivered it is to this we must look for the most effectual security." But if this has already taken place, and the hæmorrhage be stopped,—if between the paroxysms of the fit the patient complains of intense headach, great restlessness verging into delirium,—if there be other effects of hæmorrhage which I have already enumerated to you, more especially if her pulse be small and extremely rapid, opium, which would convert the other species of epileptic convulsion into a fatal apoplexy, will here prove a valuable remedy. It should be combined with gentle diffusible stimulants, and produces great relief by diminishing the headach and restlessness, and rendering the pulse fuller, softer, and less rapid. Another invaluable remedy in these cases is the combination of camphor with henbane; it acts as a mild stimulant, and yet tends to alleviate that irritability of the nervous system, which is otherwise so unmanageable and dangerous. One refreshing sleep is of immense importance, and when this has been once obtained, half our dangers and difficulties are surmounted. In every case of uterine hæmorrhage where the discharge has been great, and where the powers of the patient have suffered considerably, we should be careful to keep her in a state of as perfect quiet of body and mind as possible. Bland nourishing fluids should be given at short intervals, in small quantities at a time, and on the appearance of that intense headach which is so peculiar to this state, if the pulse be quick and small, the exhibition of the above mentioned remedies will prove of great service.

"In the *apoplectic* species," as Dr. Dewees observes, "we have nearly all the premonitory symptoms enumerated in the first species of puerperal convulsions, but of much shorter duration. It may occur like the epileptic attack at any period of gestation, but does not necessarily produce or is accompanied by labour." From this it would seem that it might be brought on by causes independent of pregnancy, though this process may be regarded as a predisposing cause. If we consider the state of pregnancy itself, and what a large formation of blood takes place, we shall be

easily able to account for the determination of blood to the head, more especially towards the end of pregnancy, when the uterus begins to contract, and the pressing the blood out of its thick spongy structure drives it in great quantities into the rest of the circulation. The treatment being precisely the same as that recommended in the first species, I now pass on to the consideration of the third, or *hysterical* species of puerperal convulsions.

These convulsions are of a character totally different to the former species, and are attended as well as preceded by a set of symptoms which mark the nature of the disease. The patient is very young, or extremely delicately made, with pale face and delicate features, and of an irritable constitution; her spirits are variable; she is peevish, anxious, and fearful, and is startled at the slightest noise, and cannot bear much or loud talking in her room. During her slumbers we may observe slight spasmodic twitchings about the muscles of the eyes and mouth; when asleep the eyes roll about restlessly, and she frequently starts. She has frequent calls to pass water, which is pale; and a sense of chilliness frequently alternates with a slight flush of heat. She is soon fatigued, even when the pains are inconsiderable, and dozes occasionally during the intervals. Upon examination per vaginam she is extremely sensitive. The os uteri remains thin, hard, distended, and painful to the touch longer than in natural cases. The pains are irregular, at one time strong, at others weak; sometimes effective, sometimes not. Before the accession of the fit (as Dr. Dewees observes) there is ringing in the ears, globus hystericus, and palpitations of the heart. The face is much less convulsed, less vacillation of the eyes, while the larger muscles of the body are much more violently convulsed. The patient at times is very obstreperous, and the muscles of the posterior part of the body are almost always violently contracted, so much so, that the body will sometimes describe an arch backwards. During these convulsions she never loses her sense of feeling to a certain degree, but starts with a sudden deep inspiration whenever cold water is dashed in her face. Nay it is difficult, and sometimes impossible, to examine per vaginam, for she seems aware of your intention, and resists most powerfully. This is a good diagnostic mark by which I have frequently been able to detect the nature of the disease. "After the fit," says Dr. Dewees, "the patient can for the most part be roused to attention, or will frequently become coherent as soon as she recovers from the fatigue or exhaustion occasioned by her violent struggles, and although she will lie apparently stupid, she will nevertheless sometimes talk and mutter indistinctly." Bleeding in these cases is seldom necessary, but attention must be paid to the bowels, as these are often in a very neglected state. During the fit, after having dashed a little cold

water suddenly upon her face, if some sp. ammoniæ fetid. in a small quantity of water can be swallowed, this will produce very speedy relief. Copious eructations from the stomach will almost immediately follow the exhibition of it, attended with an evident alleviation of the symptoms. We must, however, watch the state of the pulse with great care, for with the commencement of labour, especially in young women pregnant for the first time, a considerable determination of blood to the head is apt to follow, and here the lancet will prove of great assistance, not only in alleviating the symptoms, but in facilitating the labour. In these convulsions the prognosis is seldom unfavourable; and although they occasionally resist our endeavours previous to or during labour, still, when the uterus is emptied of its contents, they generally subside spontaneously.

I now come to an affection which, from its extremely formidable character, will try both your courage and presence of mind even more than the one which I have just considered. Instead of being attached to the fundus uteri, the placenta may be situated upon the cervix or mouth of the uterus. This has been called by the continental writers *placenta prævia*, a term which is now gradually getting into use in this country. The placenta may be so near the os uteri, that a piece of its edge will overlap it, or it may be centrally fixed directly over the os uteri itself. The late Carl Wenzel of Frankfort, in an essay which he published some time ago, denied that the placenta was ever directly over the os uteri, but this is perfectly wrong, because there are not only numerous cases of it recorded, but it is so far from being rare, that one every now and then meets with it in one's own practice. I know of no error in nature to be compared with this, since the very action which she uses to bring the child into the world is that which destroys both it and the mother.

We find no account of *placenta prævia* in the writings of the ancients, nor do we find a word about it in Puzos, Mauriceau, Deventer, Giffard, Ould, &c. It is true that they describe cases of hæmorrhage where the placenta was found at the os uteri, but considered them as the result of its having been detached from the fundus, and having fallen down upon the os uteri. To Fried, sen., of Strasburg, to Levret and Smellie, are we indebted for having ascertained the real cause of the hæmorrhage. They found upon dissection that the placenta was really attached to the os uteri. Still, however, the nature of the case was not thoroughly understood until the year 1775, when a most valuable monograph was published by my father entitled "An Essay on the Uterine Hæmorrhage which precedes the delivery of a full grown Fœtus." This was illustrated by a very considerable number of cases where the placenta had had this peculiar situation, and which adds no little to the pecu-

liar value of his observations. The distinction which he drew between hæmorrhages arising from accidental causes, and hæmorrhages depending on the attachment of the placenta to the os uteri, viz. into *accidental* and *unavoidable*, is admirable, and has been adopted everywhere. The work was translated into German in 1783, since which it has been republished in America, and translated into French by Madame Boivin; it is also used in the midwifery schools at St. Petersburg.

Professor Naegelé, in his lectures on this subject, has put the symptoms in a remarkably clear and intelligible point of view, by arranging them under the following five groups. First, in the two last months of pregnancy, a hæmorrhage suddenly appears, without any assignable external cause, and which is usually more copious than common uterine hæmorrhage. By rest and quiet it generally ceases of itself. In eight, ten, or fourteen days it returns, but is then usually more profuse. This is the first appearance which will give us reason to suspect that something is not right: its coming on in the last two months, and with no evident cause, is very diagnostic. Still, however, this is not always the case; because examples not unfrequently occur where the placenta has been seated centrally over the os uteri, and yet the woman has gone her full time. If the patient keep herself very quiet after the first flooding, she may even go four weeks until the next menstrual period arrives.

Secondly, the abdomen is less distended than usual on account of the absence of the placenta from the fundus uteri. Women who have borne several children frequently remark this themselves.

Thirdly, the os uteri is thicker than usual, but nevertheless soft. It now plays the part of the fundus, and its vessels are therefore enormously dilated. When the placenta is situated only on a portion of the os uteri, it is generally upon the anterior lip, which is much thicker; thus you may frequently feel the edge of the placenta like a second os uteri.

Fourthly, a portion of it sometimes projects through the os uteri. If it be sufficiently dilated to permit the finger to pass through, one feels the raw edge of the placenta, and this of course leaves no doubt as to the nature of the case.

Fifthly, during a pain the hæmorrhage is stronger, and diminishes as the pain goes off: this is very characteristic, because, with hæmorrhage, where the placenta has its natural situation in or near the fundus, it is quite the reverse, for here the more the uterus contracts the less is the flooding.

If the woman has a long time to go, the first attack of hæmorrhage is usually very inconsiderable, for it soon stops again; but if it return our suspicions will naturally be excited. The earlier it comes on, the smaller it is, and *vice versa*. Professor Naegelé related

to me a case of twins, where nothing had occurred to make him suspect *placenta prævia* until the very end of pregnancy, when a profuse flooding suddenly appeared, and in a short time she had lost a very large quantity. She was awaked during the night by a sensation as if she wanted to evacuate the bowels; she found a large coagulum between her legs, and had only time to reach the *pot de chambre*, which was soon filled with blood. The *placenta* which I here show you, belonged to a similar case. I had seen the patient in the morning in perfect health; she expected her labour in a week or ten days: her pregnancy had been throughout healthy. In the evening, as she was standing at the door of her house, a profuse gush of blood suddenly made its appearance; she was instantly carried to bed, and in a short time the hæmorrhage not only soaked through everything, but even formed a large pool on the floor beneath. I had another precisely similar case lately: the patient was at tea, with her family round her, and was engaged in cutting some bread and butter for the children, when a profuse torrent of blood issued from the uterus. She fancied that she had not gone her full time, but she was evidently mistaken, for the child was an unusually fine one, and could not possibly have been premature. In both these cases the *placenta* was centrally attached to the *os uteri*, and in the latter it had a strong adhesion of about the extent of a shilling, which, in these cases, is very rare.

No physiologist has succeeded in explaining the cause of the situation of the *placenta*. Oslander attempted to devise an hypothesis, but it is by no means satisfactory. Whether or not it results from the ovum being expelled from the Fallopian tube before the cavity of the uterus is sufficiently lined with decidua to prevent it falling to the lower part of the womb, is more than I can venture to assert. From the facts connected with extra-uterine pregnancy, it seems to me possible that such may be the case, but I mention it merely as my own private opinion, and as such you must take it. Left to itself, *placenta prævia* is generally fatal. The more the *os uteri* dilates, the more the *placenta* becomes separated, and both mother and child are in imminent danger of perishing from loss of blood. The mother either dies before the birth of the child, or soon after the birth of a dead child. There are, however, exceptions to this. If the *placenta* be but partially attached to the *os uteri*, so that only a small piece projects over the edge, as soon as the membranes rupture, the head presses upon it, and acts both as a plug and compress. The child is born, the uterus contracts, and the flooding ceases. There are cases also on record, where the *placenta* was expelled before the child, and yet the mother recovered; but the child has always perished: these cases have mostly happened in the country, where the accoucheur cannot immediately be on the spot.

The only case which I know of where the *placenta* came away first, and yet the child lived, is recorded by F. Ould. "I found," says he, "this woman in imminent danger, being seized with faintings and hiccup, having her face pale and Hippocratic. Upon examination, I found the *placenta* presented to the orifice of the womb, which I immediately extracted, and though the head was far advanced in the passage, I put it back into the womb, and taking hold of the feet brought a living, though very weak, child into the world. The mother also recovered, though with much difficulty."

With respect to the treatment, the child must be turned, and thus delivered as soon as possible; but it requires the greatest caution and experience in conducting the case. Nothing is more desirable than that the woman should carry her child to the full time, if possible; the child is stronger and better able to bear the loss of blood, and the uterus contracts with more power after its birth. Everything must be avoided which tends to excite uterine contractions: the most perfect state of quiet, both of body and mind, is requisite; all irritating heating food, as rich meats, coffee, wine, &c., &c., must be avoided: even warm drinks are not to be recommended. If she be plethoric, her pulse full and strong, a venesection will be necessary. The great object is that she should have no pains; if, however, the flooding return profusely, we should turn the child as soon as possible; but in the last few weeks, before the full period of utero-gestation has expired, the inferior segment of the uterus is not sufficiently developed to admit the hand, and attempts, under these circumstances, to dilate the *os uteri* are very dangerous, especially where the *placenta* is situated completely over the *os uteri*. Professor Naegelé has mentioned to me cases of this sort, where the *os uteri* has been dilated by means of the hand, where the child was turned and delivered with perfect safety, and the uterus well contracted; in fact, where everything seemed to have passed over favourably; a *stillicidium* of blood however remained after labour, which resisted every attempt to stop it. Friction on the abdomen, and other means for stopping hæmorrhage, by inducing a firm contraction of the uterus, were of no use, for the uterus was already hard and well contracted; the patient gradually became exhausted, and at last died cachectic. On examining the bodies of such persons after death, he always found that the *os uteri* had been more or less lacerated. Laceration of the *os uteri*, where the *placenta* is situated in the fundus, is a different case altogether, because then the inferior segment of the uterus has but few blood-vessels, and a slight laceration is of little consequence; but in the present case the *os uteri* plays the part of the fundus; its vessels are immensely dilated and large ones are ruptured, which cannot be completely closed by the firmest contraction of the uterus. Whether the three unfavourable cases to which

my father alludes as having occurred in the practice of some medical men, who, in his opinion, had turned too soon, and used too much violence, were of this kind or not, it is of course impossible to decide.

Review.

Cyclopædia of Anatomy and Physiology.
 Edited by ROBERT B. TODD, M. B., &c.
 Part I. Sherwood.

(Second Notice.)

IN our notice of this work in the last number we intended to present, as stated, the author's intentions and objects in its publication, but by an accident it was omitted;—we will now give it, and can only confess our regret at the omission.

“It is intended to embrace the whole of the sciences of Anatomy and Physiology, those terms being used in their largest sense as far as regards the Animal Kingdom. The anatomy of Man will form a considerable portion of the work; and this will comprise not only the healthy or *normal* condition of his economy, but likewise the *abnormal* states of the several organs and tissues, involving congenital aberrations from the natural formation as well as those changes which are the result and evidence of disease; thus affording a complete system of Human Anatomy—general, descriptive, surgical and morbid. But the anatomical portion of the work will further comprehend the anatomy of the inferior animals, contained in a series of articles to which the names of the several subregna and classes of the Animal Kingdom are prefixed; and when to these are added dissertations on certain particular organs, or on the modifications which the *systems* of organs experience in the different gradations of the animal series, a system of Comparative Anatomy will be formed, novel in its plan, and which it is presumed will prove of much greater utility to the naturalist than if it were limited to the arrangement hitherto generally adopted. In the composition of the Zootomical articles it was found advisable to introduce much that relates to the arrangement and subdivision of the several classes, and much likewise respecting the habits and peculiarities of the animals composing them, and thus a general outline of Zoology will be found included in those articles. But as the anatomist is not contented merely with what the scalpel presents to him, but has recourse to chemical analysis to obtain still further insight into the nature of animal substances, it would be a serious omission did not Animal Chemistry likewise obtain its due share of attention.

“In Physiology, which has been of late so much elucidated and advanced by the extended researches of the comparative anatomist, it is intended that this work shall afford full information as to the state of science up to the

present day, the articles in this department being placed under the heads of the principal functions which are found throughout the whole or nearly the whole animal kingdom, as well as under those of some functions *peculiar* to certain classes.”

The next article we meet with is on *Acalephæ*, by Dr. Coldstream. *Acalephæ* being a term derived from the Greek, signifying *nettles*, is so applied in consequence of the property this class of animals possess of stinging the skin like that vegetable. They exist in every sea, and have different names given to them by the vulgar in accordance with the appearances they assume, such as “sea-jelly,” “sea-nettle,” “Portuguese men-of-war,” &c. Cuvier denominated this class of animals *Acalephæ* in his “*Règne Animale*.” Linnæus placed them in the genus *Medusa*. From Pliny downwards they have been objects of attention and interest, and yet we are ignorant of their exact structure, functions, and habits. An extract is made from Peron, so expressive of the character of this class of animals, that we are tempted to re-extract it.

“Among the animals of this family we find the most important functions of life performed in bodies which offer to the eye little more than a mass of jelly. They grow frequently to a large size, so as to measure several feet in diameter; and yet we cannot always determine what are their organs of nutrition. They move with rapidity, and continue their motions for a long time; and yet we cannot always satisfactorily demonstrate their muscular system. Their secretions are frequently very abundant, and yet the secreting organs remain to be discovered. They seem to be too weak to seize any vigorous animal, and yet fishes are sometimes their prey. Their delicate stomachs appear to be wholly incapable of acting upon such food, and yet it is digested within a very short time. Most of them shine at night with great brilliancy, and yet we know little or nothing of the nature of the agent which produces so remarkable an effect, or of the organs by which it is elaborated. And, lastly, many of them sting the hand that touches them; but how, or by what means they do so, still remains a mystery.”

The arrangement of De Blainville is adopted by the author. After the above extract it is candidly confessed that “but a very imperfect account of the anatomy and physiology of this class of animals can be given.” Blainville's division is presented to the reader.

The author next discusses their mechanism, under the different systems of 1. Locomotive; 2. Motor and Sensitive; 3. Digestive; 4. Circulatory; 5. Respiratory; 6. Secretive; 7. Generative; 8th and lastly, their geographical distribution. The latter we shall transcribe.

“We conceive that a brief notice of this part of their natural history may, in some measure, illustrate the physiology of the *acalephæ*. They are met with in all seas; but certain families exist more abundantly in some

localities than in others. The ciliograda and pulmograda, for instance, are inhabitants chiefly of the colder regions, while the physograda are seldom found beyond the limits of the tropical zone. Some float in bays, and near land, but the greater number in the high seas. *Medusæ* and *cyanææ* are met with only in the cold and temperate zones of the northern hemisphere. *Cydippe* lives in the North Arctic Ocean, as well as in the Pacific, under the equator. One species of *cestum* inhabits the Mediterranean,—another the South Sea. It frequently happens that enormous numbers of one species are met with, closely grouped together, so as somewhat to impede a ship's progress for two or three successive days; after which, not a single individual of the same species is seen. In the European seas, it is chiefly in summer and autumn that the acalophæ swim on the surface. In winter, they probably sink to the bottom."

The topic treated upon in this chapter gives rise to many interesting reflections; it rouses the mind to a view of the great unanswerable questions—What is *life*? What is *organisation*? How are they conjoined? What is that plastic but fragile virtue which unites them? Where does life begin, where end?—the very be-all of animated existence! We know not. Despair follows every inquiry. Eternity can but fathom its depth—eternity explore its essence! Dr. Coldstream has done ample justice to the subject; he has presented us with a concise and perspicuous view of the knowledge we possess respecting this class of animals that fully satisfies us; he has indulged in no fanciful ideas of their mode of existence, of origin, decay, and utility in the creation, but has adduced what we know, accompanied by several well-executed wood-cuts.

We must pass over several articles and come to *Age*, by Dr. Symonds. In passing *Adipocere*, we cannot refrain from noticing, that though Fourcroy communicated to the Royal Academy of Sciences, in 1789, its nature as observed in the remains of bodies buried in the Cemetery of the Innocents, this was not the first description it had received. Sir Thomas Browne, in his (we think) "Urn Burial," gave a full description of it, and in that pompous phraseology in which he so remarkably excelled. Dr. Roget treated *Age*, in the *Cyclopædia of Practical Medicine*, not in a masterly, but only in a poetic style; we saw in it more of the fine scholar than of the philosopher. Shakspeare's division of age, and his beautiful portraiture of its different stages, was written for the public—the world in general; he but gave the outlines, so as to gratify the people; they could not have appreciated its details; the subject would not permit of such a display. Dr. Symonds has exercised much judgment in his selection of illustrations to elucidate the question. He has kept closely to facts; he has made acknowledged anatomy and physiology his starting post, and has drawn his conclusions with great fairness. He takes

man in his infancy, his growth, his maturity, and his decay, and contrasts him at these different periods. He then develops the changes of structure which the various systems that compose him undergo; each apparatus in his frame is successively reviewed. We cannot do better than give the conclusions arrived at in full, and shall offer no apology for the copiousness of the extract; it is excellent, and can do no discredit to the source from which we take it.

"If we now take a retrospect of the revolutions which have occurred in the several structures enumerated, and endeavour to arrange them under specific heads, it will be found that diminution of bulk, deficiency of fluid, and condensation of substance, comprehend them all or nearly all. The attenuation has been generally ascribed to a preponderance of absorption over deposition, or a reverse of that condition in which incremental growth consists. But we cannot enter upon the question here, and must refer to the article NUTRITION, contenting ourselves with the remark that it seems a superfluous multiplication of causes to suppose that absorption increases, when the cessation or diminution of deposition fully explains the fact, provided the absorption is only maintained in its usual ratio.

"Concerning the lessened quantity of fluid we have already made some remarks, and hinted at its relation with impaired digestion and slackened circulation. Here it is sufficient to observe that the fact is a sign of diminished vitality, by which we mean merely a diminution of vital actions, especially of those of nutrition. The abundance of fluid in the young succulent body is adapted to the constant accumulation of new particles, and to the increasing complexion of the organisation of the tissues, as well as to the reparation of waste, or to the counteraction of decomposition;—by the still abundant though diminished quantity in the adult the composition is maintained and rendered more exquisite:—in the old man there is only enough required to keep up that degree of renovation, which is necessary to the integrity of the structure, and even this action is less than in former periods, because the organisation, from its chemical nature, is less prone to decomposition. This brings us to the consideration of the third general fact, or the condensation of tissue, which will require more particular notice, because great importance has been assigned to it by some writers. The condensation is a result of the deficient humidity just spoken of; but this is not all, otherwise the condensation would be merely that of dryness; the tissue itself is of firmer materials. Thus membrane becomes ligament, ligament cartilage, cartilage bone, and bone increases in its earthy portions. This hardening of the whole body is spoken of by many writers as the cause of decay, and ultimately of death, by the gradual closure of all the small vessels, and the obstruction to vital

motions; while the methods of averting old age, proposed by the same authors, turned chiefly upon an artificial supply of moisture to the body. Galen constantly alludes to this condition when treating of old age, and the means of resisting its tendencies. Lord Bacon, in his curious and highly interesting treatise, entitled 'Historia Vitæ et Mortis,' has much to say upon desiccation and the methods of preventing it, such as bathing and inunction. The fable of the restitution of old Æsop by the cauldron of Medea, he considers typical of the utility of the warm bath in softening the substance of the body. So much stress does Haller lay on the effect of the universal tendency to induration, that he tells us that one of the reasons why fishes are so long-lived is because their bones are never hardened to the same degree as in the higher animals—'Inter animalia aves longæviores sunt, longævissimi pisces, quibus cor minimum, et lentissimum incrementum, et ossa nunquam indurantur.'—*Primæ Lineæ*, § 972. There is, however, we think, but little foundation for the supposition that induration stands in the relation of cause to the general failure of the functions of the body. It is rather a symptom of decline, or one of the phenomena in which decline consists, and is therefore itself the effect of the failure or alteration of some of the functions, more especially of the assimilative. It is a deterioration of interstitial secretion, partly promoted by the changes in circulation, in digestion, and probably in innervation, and partly itself contributing to these changes, but primarily owing its origin, like the latter, to the ultimate law, which determines that at a certain period decay shall transpire. It is in one respect a descent in the scale of organisation. This indeed is indicated by the paucity of fluids and by the slow nutritive motions, which conditions are always sufficient to warrant our application of the terms, diminished vitality or less vitalised structure; but the substance itself, independently of these deficiencies of action, belongs to a more simple organisation. We examine a blood-vessel, and instead of finding its coats of that complex texture which enables it to accommodate itself by a property, known only in living bodies, similar but superior to elasticity, we mean tonicity, we observe a plate of osseous matter, unyielding, insensible, immobile, possessing no other vital character than bare assimilation or molecular growth. We search for these admirably constructed substances which are interposed between the ribs and the sternum, and by their elasticity give extent and facility to the respiratory movements, and we discover them converted into the same matter as the contiguous bones, with the coarse property of cohesion, and, as in the former instance, with nothing but its growth to redeem it from the character of mere inorganic matter. We untangle the muscle, and instead of the irritable fibre, soft in texture but firm in contraction, we find a torpid substance,

scarcely fibrous in form, firm in mere physical cohesion, weak in vital contraction, and consequently of a degraded organisation. The processes of induration about the joints, the glands, and the integuments, will all, when examined, be found to approximate more than the former conditions of these parts to the qualities of the inanimate world. Homogeneousness of substance is alone an indication of a low organisation, and a body which possesses both this property and hardness, may be considered on the very outskirts of the region of vitality. Such are the properties of osseous deposits. May we not here perceive an analogy with the animals of the inferior classes? In many of the mollusca how trifling a degree of vitality seems adequate to the formation, growth, and reparation of their calcareous coverings and appendages; or to go down to the corallines, madrepores, and porifera, we observe that the very lowest structure that can be considered animal is sufficient to secrete or assimilate those vast collections of earthy matter which pave the ocean, and rise into islands, mountains, and mighty continents. In this hardened constitution, this simplified but degenerate structure, we see that the frame of man, in its natural decay, loses the characters that once distinguished it from the dust, and that not less literally than truly it has become more and more 'of the earth earthy.'

"We have now traversed, as far and as minutely as our space would allow, the organs and tissues, with their various alterations. It remains for us to inquire whether any one of them may be considered to stand in the relation of cause to the others. We have already dismissed the supposition, that rigidity and concretion are productive of the other alterations, and we also partly entertained the question, when treating of the relations between assimilation, the fluids, and the organs subservient to circulation and digestion. But there are one or two additional points which must be alluded to in this place.

"The decay of all the organs concerned in the *life of relations*, has been shown to depend on a failure in the actions which are necessary to their generation and maintenance; these organs may, therefore, be dismissed at once from our inquiry into the causation or priority of the processes of degeneration. Yet the observation of the marked declension of the function of the nervous system throughout the body, has led to the hypothesis, that the failure in this power is the ultimate fact in the history of our decline, the fact to which all the others may be traced. This view is suggested by Dr. Rogee, in his justly-admired article on Age, in the *Cyclopædia of Practical Medicine*. He considers the general condensation of tissue throughout the system to be occasioned by a diminished force of circulation, which allows the capillaries to collapse and become obliterated; the weakened circulation this distinguished author is inclined to attribute to a

diminution of nervous power in the muscular fibres of the heart; whence he infers that the declension of nervous power bears the priority in the chain of events. We do not feel prepared to adopt the inference; for if we admit this failure in the innervation of the heart (and whether its fibres are dependent on nerves for their contractility is still an unsettled question), are we to pass over the condition of the blood? Might we not say that the enfeebled contractions of the heart are referable to an alteration in the properties of its appropriate stimulus? It is known that this vital fluid has been less affected by respiration than in former periods of our existence; we might, therefore, when searching for the earliest antecedent in decay, stop at the imperfect arterialisation of the blood. But this would be, in our humble opinion, to pause too soon. The deficient oxygenation of the circulating fluid is sufficiently well known to be the effect of certain changes in the apparatus of respiration. And to what do these changes belong?—To a variety of structural, functional, and nervous phenomena, which, if pursued, would lead us into a maze of events, from which it would be impossible to select that which was earliest in its occurrence. Or, if we leave the respiratory system, and follow the blood backward to the process of chylification, and ultimately to digestion, we shall, as was shown above, be equally unsuccessful in obtaining satisfaction. Or finally, if we return to the heart, and investigate the diminished nervous power, admitting this diminution to be alone sufficient for the debility of circulation, is it possible to stop at this phenomenon? Nervous power is nothing but the function of nervous substance, and whether the latter belongs to the ganglionic system, or to the cerebro-spinal, it may have undergone some change, or have been stimulated differently from usual. We know that the sensibility of the nervous system is most intimately connected with the quality of the blood, and with the force of its impulse; so that if it be true that diminished circulation is the effect of diminished innervation, it is no less true that the latter is also the result of the former. Thus it appears that in this inquiry we are constantly arguing in a circle, and it can scarcely be otherwise; the principal structures and functions of the organic life commenced simultaneously; they must decline simultaneously; they assisted one another to grow; they accelerate each other in the way to dissolution. If, however, we are disposed in some measure to qualify this remark, and still hold that there must be some organic changes primary in the work of decay, all analogies must, we think, conduct us to the simple processes of assimilation and secretion, into which all the more complicated functions must be ultimately resolved; but we can go no farther, for we know not what determines or modifies the play of those subtle affinities, motions, and contractions, in which such changes consist.

“Some fancy that the enigma is solved by the hypothesis of a diminished vital power; but we have already attempted to show that the interpretation is without value, when applied to the cessation of development; the same reasons render it equally useless as a key to the hieroglyphics of decay. Not less vain were the endeavours of those who could satisfy their philosophy with such a subterfuge of ignorance as was afforded in the theory of a sum of excitability, originally allotted to the system, and gradually exhausted, &c.; as if excitability could possibly mean anything more than an expression of the collective phenomena of excitement, or vital movement. It is exactly on a par with the doctrine of decreasing vitality. Some talk prettily and poetically of the vital flame burning out, of oil gradually wasting, of fuel expended,—phrases applicable enough as metaphors, but absurd when propounded, as they too often are, as statements of matters of fact.

“When philosophy has failed to discover antecedences, she may still find a prolific source of employment in the study of harmonies. There is no event to be found in the relation of cause to those organic changes which, without the intervention of accidental agents, ultimately affix a bound to the duration of man's existence. As no cause can be elicited for the termination of development, neither can we better explain why growth does not continue stationary, and maintain the bodily structures for a series of ages, so long as external circumstances remain the same. We live in the midst of agents that both supply us with life and infest us with poison: for a time we resist the baneful tendencies, and then gradually succumb, but in what manner we are at present ignorant. The prevalence of certain functions has been supposed to fortify certain animals against the outward agents or inward processes that would otherwise urge them to dissolution. The influence of respiration upon nutrition is well known, and consequently a large sum of respiration has been alleged to account for the longevity of birds; but there are equal or much greater instances to be found among fishes and reptiles, the amount of whose respiration is extremely small. In the one case the vitality is said to be less rapidly consumed, in the other to be more abundantly supplied; explanations which amount to little more than statements of the same facts in different language. Lord Bacon was of opinion that birds owe their lengthened existence partly to the smallness of their bodies, and partly to their being so well defended by their teguments from the atmosphere; while he accounted for the long life of fishes by the non-occurrence of desiccation in their aqueous element. There is nothing satisfactory to be obtained from speculations of this sort. The most that we can learn is the variation in the term of existence by the influence of various outward agents and modes of life. But whatever variation may be discovered, it will still appear

that climate, and time, and custom, and science have never prolonged the date beyond certain limits. The study of these circumstances, and the appliances of art, undoubtedly tend to enable a greater number to attain the extreme goal, but can never give the power of transgressing it. Vain, then, as Boerhaave observes, are the hopes of men who look for an *agerasia!*

“ Although at present, then, we cannot trace the causes of the bounded nature of our existence, yet it is not difficult to discern its fitness to our constitution, and to the universal frame of things. The brevity of life is an ancient complaint; lamentations have been chaunted over it time out of mind: but its antiquity does not redeem this, any more than many other opinions equally hoary, from the character of a prejudice. Every consideration of the fact in question with reference to the universe, must ‘ justify the ways of God to man ’ in the disposition of this as of every other event. We have only to conceive the circumstance altered in correspondence with the idle wish of some aspirant to longevity, and we see that every thing else also would require to be changed; that, in short, the beautiful arrangements of the world and of our social relations would be broken. To notice one or two of these: if the life of man were longer than it now is, his progeny would need to be greatly abridged from their present numbers, or they would soon exceed the ratio of subsistence. The time occupied in attaining maturity bears a direct proportion to the period of existence in the mammalia; consequently, if life were prolonged beyond its present limits, that time during which the offspring of man is either helpless or very dependent on the parents, would be also lengthened, and the accidents of disease or other casualties remaining the same, it is clear that confusion, distress, and manifold calamities would accrue to a rising generation. After the attainment of maturity and of its accompanying faculties, it is not clear that any thing would be gained by the possession of these for a longer period than is now allowed; since we know but too well that men, after a time, lose the spirit of enterprise once engendered by the consciousness of increasing, or lately acquired powers, and fall into habits of action which they are unwilling to abandon, but which do not advance the resources of the species beyond a certain limit. Hence the advantage of their giving way to others, to whom they can commit their knowledge, and who, by their unworn energy, will advance it further. ‘ Life is sufficient for all its purposes if well employed,’ was well observed by Dr. Johnson; and what follower of medicine can forget that the immortal sage of Cos, by the example which he afforded in his well-spent life, disarmed his own antithesis of his woful point: ὁ βίος βραχύς, ἡ δὲ σίχνη μακρὴ.”

The article *Anphibia* is ably treated by Mr. T. Bell, and has numerous illustrative

wood-cuts. Dr. Grant is proceeding with *Animal Kingdom* with his usual ability.

REVIEW OF FOREIGN MEDICAL LITERATURE.

An Essay on the Consecutive Effects of Wounds on the Head, and Operations performed on its different Parts.

BY BARON LARREY.

Read at the Academy of Sciences.

WE are much gratified to observe such a work written by a person who has had the extensive experience that every one is aware Baron Larrey must have had. In this excellent essay we are pleased to find so many important facts connected with excellent observations as regards wounds of the head. This production offers much greater interest than many works hitherto written on this subject. It is well known that wounds of the head, though apparently simple in themselves, are much more difficult to treat than wounds inflicted on other parts of the body. The best means of producing a speedy cure in those wounds of the head attended with greater or less loss of substance, especially if the bony parts of the cranium have been likewise injured, has been a subject long left open for discussion. In a word, what was supposed to be the best mode of performing this cure? M. Larrey endeavours, in the first place, to prove that what was commonly believed to take place, viz.—that the external portion of the dura mater furnished a species of vascular vegetation, traversing, as it were, the foreign opening, and becoming in contact with the fleshy external edges of the wound, thus forming a species of cicatrix, the consistence of which, by degrees, becomes very solid, was altogether erroneous. The author observes that this species of organic cement, as supposed to be produced, pathologically speaking, does not take place from the dura mater. Much more, if it did, he says, there would result many serious consequences from the pressure it must naturally produce on the substance of the brain. He endeavours to show that there is a peculiar organisation in the bone which encircles the opening; that this opening, caused either by the trephine or from accident, is enclosed only by a lengthening of the osseous vessels or fibres which are attached to its borders. At the same time, he says, there is a species of concentration and retraction of the whole of the corresponding osseous wall, so that, after a complete cure of this solution of continuity, we find a sensible reduction in the whole of the corresponding region of the part trephined. M. Larrey afterwards states, that he was the first who observed this process of concentration, not only in the bones of the cranium, but moreover in those which enter in the formation of the chest, of the vertebræ, and indeed

of the whole osseous economy; after which, the author endeavours to point out the manner by which this phenomenon takes place, its progress, the advantages resulting, and the practical applications which may be deduced from it. Among the curious observations inserted in the memoir of M. Larrey, there are two which particularly strike us from their singularity. The first is relative to Juville, a young surgeon, who received a blow on the head by a howitzer, who for a long time lost the use of his intellectual powers, and lived in this state for as many as twelve years after the wound was received. The second is that of a young artillery officer, who was severely wounded in the right parietal region, and who a short time after this accident committed suicide in the following curious manner:—He appears to have guided with his finger an extremely sharp-pointed knife through the new-formed cicatrix, and plunged it into the cerebellum by pressing the handle of the instrument against the walls of his cell. This is certainly a new mode of committing suicide, unknown to those who, weary of life, wish to terminate their existence as speedily as possible. But M. Larrey, not content with examining the consecutive effects of wounds of the head connected with the cranium and cerebrum, makes farther observations on wounds of the eyes; and his remarks on injuries of this organ are as usual extremely good. With regard to his remarks on different wounds of the face, comprising those of the maxillary bones, we can but say that they are equally judicious. In conclusion, we believe this essay well worthy of the high reputation of the author, the whole of it being illustrated by cases, and founded upon the basis of facts.

On Simple and Forced Catheterism; and on the Treatment of Contractions of the Urethra, and on Urinary Fistula.

BY M. MAYOR.

THE work which we are about to notice appears destined to produce much sensation in the surgical world. It is now nearly fifteen years since Ducamp called the attention of surgeons to contractions of the urethra, and the four principal methods of treatment, viz. by dilatation, by cauterisation, by scarification, and by injections, each of which has in its turn been so much modified, that it is needless to hope that there remains a much farther scope for the minds of the ingenious. This multiplicity of proceedings has proved that dilatation is not only more simple, but much more efficacious than any of the rest. It is owing to this that M. Mayor has exerted himself in the modification of this practice. Indeed he appears to have so much improved upon it, that his proceeding is altogether new. He repels as useless and hurtful the principles most commonly admitted. From the success which has attended the cases treated by M. Mayor in the different Parisian hospitals, we think it our

duty as journalists to give the whole of them in as complete and condensed a form as our pages will admit of. They appear to us to threaten a complete revolution in this important branch of surgery.

The general principles followed at the present time in producing dilatation of the urethra are, 1st. To commence with very small bougies; 2nd. To prefer those which are soft, such as the elastic gum rather than the metallic instrument; 3rd. To proceed with caution, and to increase the calibre of the dilating body gradually, indeed almost insensibly; 4th. To allow the instrument to remain in the passage of the urethra and bladder. On the contrary, M. Mayor recommends—1st. To make use of a catheter of large calibre; for example, the smallest of his catheters is not less than two lines in diameter; 2nd. To use exclusively metallic instruments; 3rd. To introduce at the first sitting a catheter of two lines, and every day increase the volume, so that in a few days one not less than four lines and a half in diameter may be passed. 4th. He believes it imprudent to allow the catheter to remain in the urethra for any length of time. Certainly nothing could be more opposed than these two methods. Let us examine what are the motives which led him to this opposite conclusion. "If you have (he says) a choice between a very small and a very large syringe for the injection of a lavement, without considering the preference, you would undoubtedly have recourse to the latter, because you would save those painful pricking sensations produced by the smaller one as it becomes arrested by the folds of the mucous membrane. If we make comparative attempts and close the fingers so as to form a cavity, and then pass a conical silver sound in the palmar region, you will find the fingers pricked, in consequence of the stilet meeting with slight fractuosities about the part. With a large catheter on the contrary, you would penetrate the cavity with facility, and without causing the least sensation of pain. But the use of small bougies must inevitably tend to produce a false passage, whilst a large elastic bougie would glide as it were upon itself, and penetrate in the direction where the least resistance is offered in the passage. We may simulate much better still that which passes a contraction of the urethra in strangury, by means of a piece of string or riband loosely tied in a simple knot. If we wish to force the contraction with a small sound, in most cases we should run the risk of perforating the intestine, whilst a metallic large one would push all the small fractuosities before it, and cause the constriction to disappear without damaging the intestinal walls." Finally, one of the last proofs which M. Mayor offers with regard to the preference in the use of instruments of large calibre would at first sight be perceived by catheterism on the dead body. "In almost every case, with a large one, you would be enabled to succeed, whilst, on the contrary, a small one most fre-

quently would meet with some obstruction in its course."

But how can we expect that an instrument so voluminous could pass without disordering a canal so much contracted? To this M. Mayor replies:—"With what slight danger we can introduce many fingers, and even the entire hand, into the rectum." He says next, "How does an enormous head of the fœtus dilate the vagina during the pains of labour." The latter he states is very similar to forced catheterism, and consequently he believes we cannot do better than imitate the process of nature. When the catheter has arrived at the contracted portion of the urethra it is necessary to use constant pressure; and at the same time, in order for it to penetrate, many manœuvres, such as twisting the instrument in various directions, are needful.

In making some observations on the progress of the head of the fœtus during parturition, it is necessary not to press upon the head so as to allow the process to be interrupted. But, at the same time, so that the patient might not be fatigued, and the parts may have time to dilate, it is proper to keep up gentle, but continued action of the instrument. If no progress is made in the dilatation of the stricture, instead of employing too much force to overcome, a number of these manœuvres are necessary, which at each period may be exercised with a little more violence. It may be easily perceived that if all these manœuvres are necessary, the metallic sound infinitely surpasses the elastic.

The second principle which has led M. Mayor to these considerations is the constriction, which has been stated to be so narrow, and surrounded with such hard and resisting tissue, that it would be impossible to admit a sound of so large a calibre; and, if in such a case much force was applied, a false passage would be the result. To this he replies, that a moderate and continued pressure would suffice to overcome every resistance. It is true a sound may be used with sufficient force to rupture the bladder, but the same results may be produced in the womb by the elbow, heel, or knee, in prolonged parturition. The canals of the ureters are also dilated, from the pressure of large calculi against their walls. If, then, such resistance can be overcome by these large bodies, why should not the same thing occur in cases of contraction of the urethra? In some cases, though evidently they are very rare exceptions, it is impossible to overcome the stricture. But we cannot with reason make an objection to this doctrine when, in the majority of cases, it is not the fact.

M. Mayor further states, that if we take a layer of tissue, however resistant it might appear, and make a small hole at any given point in it, and then apply the point of a catheter against it, the first efforts of the instrument would be to depress the edge of this artificial canal, so as to make it of a funnel shape, after which, by degrees, it would be

deeper depressed, and if the pressure was continued long enough, a large passage would be the result.

We must admit that this objection does not appear sufficiently clear, for supposing we allow that such was the case in the experiment quoted, it is evident that the large perforation would be much more speedily affected by a sound, one line in diameter, than with one double that size, which certainly would be in direct opposition to the views of M. Mayor. His other comparisons do not appear to us to be altogether founded upon true principles. If a moderate pressure is sufficient to perforate the bladder, why should not the same means be sufficient to perforate the urethra? But M. Mayor states that the contraction is the part where dilatation more readily takes place, and whatever may be its seat, and the tortuous course of the canal it follows, that this soft and flexible canal adapts itself to the direction of the catheter, precisely in the same way as the sheath of a sword will to this instrument. Although this comparison is very ingenious it certainly is not just. The urethra will not always give to the sound, and this is too well known to medical men from experience, as they are well aware that they more frequently produce the false passage, than overcome the seat of stricture. The notions of M. Mayor, then, are doubtless sufficiently plausible to tempt many to try this new means; their value, however, must there stop, and need no farther demonstration. The only powerful reply to make to the objections spoken of, is, in fact, nothing more than M. Mayor and many others have attained by overcoming these retractions without any serious consequences with sounds of two lines in diameter, so that sounds of two lines necessarily traverse the urethra better than those of one line in diameter. But at all times to perform this operation the operator must have a thorough anatomical knowledge of the part, he must be experienced in the use of the sound, and have a sufficient tact to detect when the pressure is not hurtful, and to understand when the resistance of the tissue has been overcome.

Let us suppose at all times the resistance is overcome, is there then any necessity for allowing the instrument to remain in the bladder? It is from observation, says M. Mayor, we observe that the urethra, like the vagina, anus, and indeed all other mucous canals, does not, after being much distended, immediately contract; most frequently we find that it is a long time retracting. The contractile power appears overcome, so that after some time has elapsed, we may reintroduce, without great pain, the same sized instrument as was used to destroy the stricture, and even immediately afterwards substitute one of larger diameter. Generally speaking, once or twice having recourse to the instrument is sufficient to prevent the reproduction of the constricted part. More than once M. Mayor states that

he has been enabled to combat this disposition by making use of large sized instruments at the first sitting. Supposing this to be the case, it is evident that the permanence of the sound in the urethra is useless, and thus it would appear that the advantages of the gum-elastic sound over the metallic are void. But nevertheless there is an advantage arising from the canal being left free, which is in being more speedily aware of any affections, such as paralysis of the bladder, which frequently arise from the attempts necessary to destroy the stricture. The contractile power of the urethra is also hastened by allowing the patient to make frequent attempts in discharging his urine before the reintroduction of the sound.

A word as to the rapid increase of large instruments. We shall find, as I have frequently done (says the author), that this augmentation, after the obstacle has been encountered, does not in the least affect its introduction. The instruments which M. Mayor uses are of six different diameters; the first has two lines in diameter, and each of the others is half a line in diameter larger, so that the sixth would measure four lines and a half. He uses also a seventh sound, which may be termed conical, the point corresponding to No. 1, and the other extremity to No. 6. This is intended for gradual pressure. In the first place, it is used on the meatus urinarius, if dilatation of this passage is necessary for the introduction of the other instruments, and also on any other contracted portion, should it be needful. The whole of his instruments have a unique curve, and possess no other peculiarities. The whole are hollow, and resemble catheters; but the holes which they possess at the extremities are rendered smooth externally, so that not the least laceration of the urethral membrane can take place. The cavity of the tube never should extend beyond the last holes, so that by this means the cul-de-sac which is left at the point of the instrument is prevented.

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**ABSTRACT OF THE EVIDENCE TAKEN
BEFORE THE PARLIAMENTARY
COMMITTEE IN 1834.**

May 1st, 1834.—MR. WILLIAM CLIFT called in and examined.

This witness, in answer to several preliminary questions, replied that he was Conservator of the Museum in the College of Surgeons, to which office he was appointed by the College in the beginning of the year 1800. The Hunterian collection was at that time placed at No. 13, Castle-street, Leicester-square, premises which communicated with the dwelling-house of Mr. Hunter. After Mr. Hunter's death, these premises continued to be rented for the purpose of holding the collection, till a new room should be built for its reception.

It remained there till Midsummer, 1806, and between Midsummer and Michaelmas, as at Michaelmas the lease expired, the collection was obliged to be moved to Lincoln's-Inn-Fields. The new room for its reception at the latter place was not then built. It was completed, however, so far as to be open to visitors, some time in the year 1813. To questions respecting the building of the College, the witness answered that the trustees recommended to Parliament, in 1806, that a grant of 15,000*l.* should be made towards building the College, on the Council of the College binding themselves to complete the buildings according to the plans within three years, and also to provide, out of the funds of the College, against any ulterior expense. But when those three years had expired, the building yet remaining incomplete, Parliament in 1810 voted a further sum of 12,500*l.* towards the completion of the building, on the Council undertaking to make good any deficiency out of the funds of the College. From the removal of the collection in 1806, until the completion of the building in 1813, the collection remained quite inaccessible to the public; the whole of it, in fact, being packed up, as it were, in a store-room. It appears also from this witness, that *while* the collection remained in Castle-street it was accessible, but very few visitors came. Mr. Clift was constantly employed between 1800 and 1806 in superintending and arranging the collection, and states that no very considerable part of it was in packages, but that it *was displayed* much as it is at present.

The examination now turned on the manuscripts of Mr. Hunter. The witness, in reply to a question demanding what manuscripts of Mr. Hunter in any way descriptive or relating to the collection were then in the Museum in Castle-street, when he was first appointed Conservator in 1800, stated, that there were twenty-four fasciculi relating to the gallery preparations, that is, the physiological part of the collection, two separate volumes relating to the pathological series, and one other volume relating to the fossils. The examination proceeded. "Had you any knowledge at that time of the existence of other manuscripts of Mr. Hunter's relating to the collection, than a very general and imperfect catalogue, descriptive only of the principle on which it had been formed?" Mr. Clift answered in the affirmative, and stated further that he believed he had seen nearly the whole of Mr. Hunter's manuscripts, some of which were descriptive of the pathological preparations. They related to the history of the cases of many particular pathological specimens, that is, an account of the patients from whom these specimens were obtained. In these manuscripts such references were made, that a good anatomist and physiologist having access to both preparation and manuscript would have been enabled to connect one with the other. The

loss of the original descriptions of these cases greatly reduced the interest and value of the corresponding preparations. To a question requesting Mr. Clift's opinion, whether, since the Government had purchased the collection for the public, all the papers and manuscripts bearing any reference to that collection ought to be given up with it as public property, Mr. Clift replied, "I cannot help thinking that that was the purport of the following expressions in Mr. Hunter's will:—'*I also give to the said Matthew Baillie and Everard Home all my collection of Natural History, and the cases and other things belonging thereto, or used therewith, upon trust that they offer the same to sale in one entire lot to the Government of Great Britain,*' &c. &c."

Mr. Clift, before his appointment as Conservator of the Museum, had access to the collection from the 16th of October, 1793, and before that, during nearly two years, while he was Mr. Hunter's apprentice, and had the entire charge of it from 1793 to 1800. It appears further, from Mr. Clift's evidence, that at the period of Mr. Hunter's death, and for some time afterwards, the manuscripts were deposited with the collection in an ante-room; but shortly before it was transferred to the College of Surgeons the manuscripts were removed, and of this fact Mr. Clift was unaware until the executors of Mr. Hunter were about to deliver the collection into the possession of the College of Surgeons. So long as the collection remained in Castle-street it was under the care of Mr. Hunter's executors, that is, until the beginning of 1800, when it was transferred to Lincoln's-Inn-Fields. The trustees of the Museum then received it from the executors, and immediately resigned it into the hands of the College. (The following is interesting to the admirers of Hunter and the lovers of integrity).—"At the time of the separation of the manuscripts from the collection, the former were taken by Mr. Clift, *in a cart*, to Sir Everard Home's residence, by *his order*. It was understood by the trustees that Sir Everard Home was the *only* person who could make a catalogue of the collection (!) and he always expressed his *intention* to do so, but nothing was said on that subject at the time of transferring the papers to Sir Everard Home's house; all he said was "that those papers, being a very large proportion of them loose fasciculi, were not fit for the public eye, and, *therefore*, he should take them into his own keeping, for the purpose of using them in describing the collection. (It does not appear that the trustees were made acquainted with the removal of the papers, it having happened *just before* they took possession of the Museum, or that Mr. Clift at the time of its removal to Lincoln's-Inn-Fields informed the Council of the College of the fact, the latter making no inquiry on the subject.) The examination goes on to show that in 1813, when the collection began to be put in order in the new building, Mr.

Clift was employed to assist in arranging it *entirely* under Sir Everard Home's direction. There was no access, however, to the manuscripts at that time, they not being necessary, because, in the general arrangement of the collection, the before-mentioned fasciculi were taken as guides. The preparations were numbered, and it was deemed merely necessary to get them into their places, according to the three folio catalogues which from 1794 down to 1806 had been prepared, two by Mr. Clift, and a third by Dr. Shaw. These catalogues related to the collection generally; they were explanatory of the arrangement, but did not enter into the history of each particular physiological or pathological preparation. The general arrangement of the collection on the shelves of the Museum was completed "*in a manner*," in 1813.

The following is the substance of replies made by Mr. Clift to questions from the Chair, as to what time the use of the manuscripts would have been desirable in order to form a descriptive catalogue, giving a detailed account of each particular preparation:—"The period when they would have been available was not until 1817. The work was expected to be performed by Sir Everard Home, and, therefore, Mr. Clift did not represent to him in 1817 "that, in order to complete the catalogue, it was necessary he should have access to the original manuscripts, although it occurred to him that, in order to make a thorough description, it would be necessary to have recourse to them. It was not till 1823 that Mr. Clift had any communication with the Council respecting the manuscripts which had been removed. In the meantime, Sir Everard Home was constantly urged by the trustees to proceed with his descriptive catalogue, and the College, tired, we suppose, with this gentleman's inactivity, in one of its publications stated that, in 1816, it was proposed that all the curators should become joint-labourers till the great work of drawing it up, when Sir E. Home declared "*that it was his special duty, and that he would admit of no participation in its performance.*" (Verily, the public and the profession have much reason to be obliged to him!) He did not, however, perform this duty; a synopsis was, however, produced, a very slight description of the general arrangement, merely the heads of series, not entering at all into the particular history of each case, and anything but a descriptive catalogue. In 1817, the Board of Curators determined to supersede Sir E. Home, and employ Mr. Clift in his place; yet, with strange inconsistency, Sir Everard was *still* to have the direction of the affair. About this time Mr. Clift was reinforced by his son, who was engaged to assist him; and the Board of Curators further appointed Sir William Blizard, Mr. Clive, and Mr. Abernethy to be a sub-committee for the special purpose of superintending the formation of the catalogue, and egging on Sir Everard to do what it was gravely assumed no one

else could perform so well. When, however, the conservator began his task of preparing the catalogue, he expressed a wish to obtain some of Mr. Hunter's manuscripts; and thus did the Board of Curators learn for the first time the *extent* and nature of the papers relative to the collection left by Mr. Hunter. This came to pass in 1823. During the interval between 1817 and 1823 the conservator *never* had access to any of the Hunterian manuscripts, save and except such as Sir E. Home brought with him to compare with specimens in the collection for *his own special purposes*; that is (mark the amiable disinterestedness of the transaction), when he was preparing for *his* lectures, or (mark again!) *drawing up papers* for the Philosophical Transactions.

We shall continue this abstract of the evidence adduced before the Parliamentary Committee in our succeeding numbers; in doing so, we shall take especial care to publish in a condensed form all that is substantial in it, and of consequence to the profession to be acquainted with.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 9th, 1835.

HENRY EARLE, Esq., F.R.S., President, in the Chair.

THIS evening was occupied by the reading of the remainder of Dr. Sim's long and important communication, the first part of which consisted of Hypertrophy and Hyperæmia of the Brain, has received our notice in No. 175; we now turn to the second portion of the paper, viz. Atrophy of the Brain.

The author, after remarking at some length on the general and partial anatomical characters of atrophy, viz. the loss of weight and size, the shrinking, the interstitial serous effusion, the toughness of the white cerebral matter, arising from the absorption of the pulp, the flaccidity, the effusion of serum into the cavities, the thickening of the bones of the cranium, especially at the anterior part of the head, detailed eleven cases in which the author had found the cerebral mass much diminished in size, either generally or partially. Next followed the inferences naturally deducible from the preceding facts and observations on hypertrophy and atrophy of the brain, which the author classed under the following heads:—1st, that the boiled albumen, ground rice pudding, and cream cheese appearances of the brain noticed by various pathologists, are indications in numerous instances of acute disease of the brain; 2ndly, that hypertrophy is connected with apoplectic seizures; and, 3rdly, that in the hypertrophied state of the brain a slight congestion or effusion of blood may produce alarming or fatal effects; fourthly, that exten-

sive pectoral organic disease may occasion hypertrophy within the cranium; fifthly, that simple apoplexy depending on preternatural cerebral development, is an occasional cause of what is styled sudden death; sixthly, that hypertrophy of the brain often ends in inflammatory ramollissement, either acute or chronic; and, lastly, that in atrophy of the brain the space left vacant by cerebral absorption is supplied either by serous effusion, or by osseous deposition, generally on the inner table of the cranium.

The author next proceeded to the consideration of the third division of the paper, which was not, through some mistake, announced when the two first portions were, although received with them; hence the error we have apparently fallen into in stating that Dr. Sim's communication consisted of two, instead of three, parts.

This part, which treats of the phenomena displayed by nature for the cure of ramollissement of the brain, is of immense importance, as all authors of the present day, whether British or Continental, deny that the cure of ramollissement ever takes place, and Andral considers it universally fatal, and asks whether it can be cured? But this mode of reasoning Dr. Sims considers evading the question.

The author conceives the characteristic appearances of an healing or cured ramollissement is a fawn-coloured deposit in the grey matter, connected with atrophy of the part, and numerous small holes in the white matter with yellow deposit, both which he regards as evidence of arrest, or the cure of red softening: and clean cut cavities in the white matter, and sometimes in the neighbouring grey matter (and especially in the corpus striatum); and numerous small holes lined by serous membranes and containing serous fluid; also the cream cheese appearance; and the small hardened lumps in, and the general hardening of, the white matter;—the Doctor regards as evidences of the arrest or cure of the white softening of the brain.

Next to his own opinions, the author notices the opinions on the subject of the cause, progress, and effects of cerebral softening maintained by the most eminent writers of the present day, and then appositely followed the detail of eight cases with post mortem appearances, affording ample opportunity of satisfying himself that the arrest or cure of ramollissement of the brain had taken place.

The author concluded his interesting and practical paper, which abounds with some of the most important facts in connexion with the morbid condition of the brain herein treated of, the greater part of which our most eminent writers of this country we believe know little or nothing about, and the same with foreign authors. Perhaps, in justice to M. Cruveilhier, we ought to state that he comes nearer to the views, not only entertained but maintained by Dr. Sims, than any other writer.

How the author maintains the conclusions he has arrived at as regards the phenomena displayed by nature for the cure of ramollissement of the brain, may be judged by the last passage of his admirable paper, where the Doctor remarks that the preceding facts and observations are sufficient to attest the cure of ramollissement of the brain, and to set the question respecting its possibility at rest on the solid basis of pathological anatomy.

Mr. South, a short time prior to the conclusion of the paper, requested to know how much longer it would take to complete the reading, for if it continued much longer there would be but little, if any, time left for discussing the subject, which he was anxious to do; and therefore begged leave to propose, provided he was not out of order, that another evening should be devoted for the remainder of it.

Dr. Copland requested to know whether the paper would not be published in full; and if so it would afford the profession the best means of judging of the merits, which he considered almost impossible to do from hearing it read only once.

The President, in answer to Dr. C.'s question, said, it did not rest with him (the President), but with the Council, what papers should or should not be published! not but that he had fully resolved what in justice ought to be done with the able one now under consideration. He then asked distinctly whether any member seconded Mr. South's motion, and, as no member rose with that intent, the proposition was lost.

Mr. Partridge then called on Dr. Sims to explain the drawings portraying the morbid conditions of the brain demonstrated in the paper; after which he (Mr. P.) announced two papers from Dr. Yellowly, and a communication from Mr. Stanley, which will be published, if deemed worthy, in the forthcoming volume of the Medical Chirurgical Transactions. The President then adjourned the meetings for the season.

ACADEMY OF SCIENCES.

Sitting 25th May, 1835.

A Memoir on the Distribution and Motion of the Fluids in Plants.

BY M. GIROU, OF BUZARINGNES.

THE author commenced by giving a description of the apparatus producing this movement, which, he said, was composed of small bags and vessels. The utriculi are, he says, the principle and term of organisation; it is from them that the vessels spring; it is in them, or in their surface, that the nutritive fluids are decanted. Their form is very variable, sometimes angular, at others round, and, again, sometimes elongated. Their tissue is very thin, transparent, and membranous; each utriculi appears in reality to be composed

of two, one of which is situated within the other, and it is in the centre one that gas is contained. The space separating them is occupied by a fluid, which appears secreted from the membrane. This fact may very easily be observed in red beet-root. The red colour of the sap will easily allow the fluid portions to be distinguished from the gaseous. The relations of the gas to the liquid are not always the same; sometimes the gas occupies nearly the whole of the capacity of the utriculus, at others it occupies only a small portion of it, and sometimes it is altogether absent. The quantity of gas appears to M. Girou to be much greater in the young utriculi than in those which have been completely developed, or those which have been exposed to heat and dryness, more than those which have been exposed to coldness and moisture. This organisation manifests itself in those piles which are nothing more than elongated utriculi.

M. Girou distinguishes the vessels in ducts between the utriculi in abductor and adductor vessels. The inter-utricular ducts, as their name implies, take a serpentine course between the utriculi, and are composed of two concentric tubes. The interval between the two is filled by a liquid, the internal one containing gas. In these ducts, the author states, the two fluids are not constantly in the same proportion with respect to dilatation and quantity. He says, that one gives to the pressure of the other, so that the whole capacity of the duct appears occupied in one point by one of the fluids, and in another by the other.

It has been supposed that the inter-utricular canals were only cavities limited by the utricular walls. The inverse proposition would also be true, that the organisation of the utriculus is continued in the duct, and *vice versa*. M. Girou divides the abductor vessels into *simple*, *spiral*, and *annular*.

The first, he says, are cylindrical tubes of very small character, analogous to the inter-utricular ducts, of which, in all probability, they are nothing more than a transformation, and which present at their surface a simple formation. We frequently find them near the pith, but they are situated much more abundantly in the fibrous texture. They contain, the author states, a liquid and gas precisely the same as the inter-utricular canals. The simple vessels resemble very elongated utriculi situated one near the other, and separated by a very slight annular contraction. The gas may be observed moving, and disengaging itself as it were in small bubbles, which, after they have been discharged, become of a round appearance.

The spiral vessels are a continuation of the simple vessels, and in all probability also of the inter-utricular vessels. They are also composed of an external tunie, to which the spire is attached, and under which is the liquid. The author states that he has seen the internal tube project to the orifice of the

external, which he was easily able to distinguish by its transparency and its calibre. The spiral tube also rolled on the internal tube, and the gas moved in the spiral vessels, and escaped from them. But in plants possessing coloured sap, he has seen the liquid move in these spiral vessels, when by the dilatation a species of hernia has been produced, in the tunic between the separated spires. We meet the spiral vessels in the stalks and foliated organs; more rarely, however, in the woody part and the roots. In those parts where these spiral vessels abound, the simple ones are rare, or altogether wanting.

In endeavouring to discover the spiral organisation, M. Girou has been led to imagine that it is tuberculous, and filled with a substance less transparent than the walls.

I have already said, continued the author, that I have seen in the red beet and in the vessel, the spires of which are separated, the liquid yielding to the dilatation of the gas, and again to contract, as it were, against the spire, and increase its elongation. I believe myself authorised, by the hygroscopicity of the utricular vessels, to suppose that the spiral fill themselves from the liquid with which they are surrounded. The spiral is a continued valve; the pressure of the gas is exercised from below upwards, or from the root towards the leaves, since it is in this sense that it dilates. It is exercised also in each vessel from the centre to the circumference, thus tending to carry the liquid the length of the spire, against which it presses it, and as the latter resists the pressure much more, at least, than the membrane which unites the spires, forming for the liquid a support which prevents it from either discarding or diminishing the action of its weight. The annular vessels situated near the pith have their rings sometimes contiguous, but in general, as they are situated near the marrow, they are much more divided. These rings, like the spiral, are susceptible of being isolated, and when isolated there is not the least appearance of any rupture. They are less cylindrical and more flattened than the spiral vessels, with which their situation and their structure tend to make them to be considered as very analogous, which confirms the observation, well known, of the air vessels being in part spiral and part annular. The annular vessels are composed, like the spiral, of two tunics, and the distribution of the two fluids in them is precisely the same. The ring is not rolled towards the two extremities of the curved line which forms it, and it allows the sap to rise, but as the liquid descends it prevents it, and performs in reality the function of a valve.

The abductor or false air-vessels.—The author comprehends, under this term, the punctuated vessels which divide also in annular and spiral. He considers them as the transformation of longitudinal slices of utriculi, as air-vessels would be the transformation of inter-utricular ducts.

The false air-vessel is composed of two tunics, one internal, containing gas, and the other external, in the interval of which is the liquid. The external membrane is surrounded by a cellular net-work, the meshes of which change their form according to the distended state of the vessel. On the composition of this net-work, M. Girou makes such minute observations, that it is impossible for us to find room for them. Afterwards, he examines those opinions which led to the belief that the false air-vessels were continued in the true ones, which the author stated was altogether erroneous.

In the coniferæ, M. Girou says, we find only simple and spotted vessels. The latter possess two opposed sides, one covered with small nipples, which correspond to the intervals separating the elongated utriculi transversely with the medullary rays extremely thin in plants; so that each of these utriculi passes between two of these nipples, and thus exercises a pressure which renders it most prominent. Hence, continued the author, I consider the simple vessels as analogous to the simple adductors of other plants, and the nipped vessels as analogous to the abductors; because the one presents the necessary condition to the rising of the sap, and the other to the distribution of the nourishing fluid. Lastly, the author endeavoured to prove, from the organisation and position of the vessels which he has described, that those which they called adductors merit, in fact, this name, and carry the sap from the roots to the flowers and leaves, whilst the abductors re-carry from these same parts towards the roots the elaborated sap; thus distributing throughout the plant the nourishing fluid. The latter part of his memoir was pointing out the action of this apparatus whilst under the influence of heat and light.

To this abstruse, though interesting theory, in a subsequent number we will return.

PUFFS IN ADVERTISEMENTS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I was much pleased, a short time since, at observing that you had taken up the cudgels in defence of the regular practitioner, and with the view of destroying the illegitimate pretender to medical science, or, in other words, the quack, and his abettors, whether in or out of the profession. By pursuing steadily this line of conduct, without allowing any circumstances whatever to cause you to swerve to the right or to the left, you will merit the thanks and gratitude, not merely of your medical brethren, but also of the public at large.

There is one part of the subject upon which you have touched, but which I am inclined to think merits a fuller exposure, I mean the attaching testimonials from respectable medical

practitioners to the puffing advertisements of these individuals. It cannot be assumed for an instant that gentlemen of the profession who have a reputation to lose would authorise such use of their names; the consequences must be too evident and too painful, were there even no feelings of honour to interfere, to allow of such proceedings. It is possible that any denial in the public papers would only serve to render the impostors more notorious, but still I cannot help thinking that it is a duty the gentlemen, whose names have been thus abused, owe to their brethren and the respectability of the profession to which they belong, to come forward and disclaim the documents in question. It were almost needless to enumerate such advertisements, every paper will furnish examples; I shall, however, with your permission, allude to one of the most glaring, because it bears the names of two very respectable surgeons, and purports to come from a surgeon residing in the Blackfriars' Road. In the *Sunday Times* of the 7th inst. appears an advertisement headed "Franks' Specific Solution for the cure of Gonorrhœa, Gleet," &c., &c. In proof of the valuable and extreme efficacy, Joseph Henry Green, Surgeon to the St. Thomas's Hospital, and Professor of Surgery to the King's College, and Bransby Cooper, Esq., Surgeon to Guy's Hospital, and Lecturer on Anatomy, have, it is said, given their testimony. At least letters purporting to come from them are printed just below a caution to the effect that, unless, the name of George Franks be on the government stamp, the article is not genuine. Now I think every one who has heard of either of these gentlemen must conclude that these letters did not come from them; it is scarcely credible that either of them should have penned a letter in favour of a secret medicine. Should, however, it prove so, there is, there can be, but one line of conduct to pursue; they must be held up to public reprehension. It is said that Mr. Green is the next on the list for the Council at the College of Surgeons; if he is in reality the author of the letter published by Franks, it is to be hoped that the Council will show their sense of what is due to the dignity and respectability of that profession which they have sworn to uphold, by excluding him from a seat at their board.

I have the honour to be, Gentlemen,

Yours obediently,

M. R. C. S.

INJURIOUS EFFECTS OF ARDENT SPIRITS.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—The following extract from Capt. Ross's narrative may be interesting to such of your readers as have not had time or courage to

undertake the perusal of his ponderous book—a book, however, containing much that is highly interesting, though diluted with "an infinite deal of nothing." The passage, it will be seen, bears evidence to the injurious effect of spirits, not only on the future health, but also on the present strength and capability of endurance, showing that inflammation and debility are often its *immediate*, as well as *remote* consequences; and this testimony derives additional force from the avowal of Ross, that he writes, not as an advocate of Temperance Societies, but as an unbiassed observer, deriving his opinions on the matter from simple facts.

F. O. W.

"We arrived at the ship, after an absence of nearly nine days, and found everything right, and all in good health. If it is but justice to the men to say that they exerted themselves to the utmost, they deserve even more praise for a very different display of obedience and self-devotedness. As I was the only one who drank no spirits, and was also the only person who had not inflamed eyes, I represented that the use of grog was the cause, and therefore proposed that they should abandon this indulgence; showing further, that although I was very much the oldest of the party, I bore fatigue better than any of them. There was no hesitation in acquiescing, and the merit was the greater, since, independently of the surrender of a seaman's fixed habits, they had always considered this the chief part of their support. Thus we brought back all of this stock which had not been consumed on the first day.

"It is difficult to persuade men, even though they should not be habitual drinkers of spirits, that the use of these liquors is debilitating instead of the reverse. The immediate stimulus gives a temporary courage, and its effect is mistaken for an infusion of new strength. But the slightest attention will show how exactly the result is the reverse. It is sufficient to give men under hard and steady labour a draught of the usual grog, or a dram, to perceive that, often in a few minutes, they become languid, and, as they generally term it, faint; losing their strength, in reality, while they attribute that to the continuance of the fatiguing exertions. He who will make the corresponding experiments on two equal boats' crews, rowing in a heavy sea, will soon be convinced that the water-drinkers will far outdo the others; while no better testimony, to this is required than the experience of the men who work in the iron founderies. That is the hardest work which falls to a man to do, and so well do the labourers in this department know that they cannot perform it if they drink even beer, that their sole beverage during all the hours of this hot and heavy labour, is water. If London draymen and coal-heavers are of a different opinion, every one knows the result, as the self-indulgence which leads to this luxurious and profligate practice is not

less known. It is not that I am declaring myself an advocate for Temperance Societies, whatever may be their advantages, nor that I am desirous of copying a practice lately introduced into some ships, under whatever motives; but were it in my power, as commanding a vessel, I would exclude the use of grog, on the mere grounds of its debilitating effects, and independently of any ulterior injury which it may do, reserving it for those cases alone in which its use may be deemed medicinal, or for any special reasons useful." *Narrative of a Second Voyage, &c. p. 396.*

ANALYSIS OF THE LIQUID CONTAINED IN THE COCOA, AND OF THE FRUIT ITSELF.

BY M. BARTOLOMEO BIZIO.

FROM the analysis of this fluid, it appears that 100 parts consist of 95 water, 3.825 crystallised glycine, 0.750 zimome, 0.250 mucilage, and, finally, 0.175 loss. It is rather remarkable that there should be discovered in this liquid a mild crystallisable principle, identical with that found by M. Robiquet in the moss orseille, and which he has called *orcine*, and with that other principle found by M. Latour in the bark of the root of the pomegranate, and described by under the name of *granatine*.

Glycine, like *orcine* and *granatine*, is soluble in water and alcohol, crystallises by gentle evaporation from its solution, is precipitated by the subacetate of lead, and does not undergo the alcoholic fermentation, though treated in the manner which generally induces the fermentation of sugar and saccharine substances. The same principle has been found in the fruit, by treating it with alcohol after complete expression of the oil.

100 parts of the fruit contains 71.488 oil, 7.665 zimome, 3.588 mucilage, 1.595 glycine in crystals, 0.325 of a yellow colouring principle, 14.950 of woody fibre, and 0.392 loss.

The cocoa nut oil when fluid is limpid and colourless like water, whilst at a temperature of 15 or 16 degree above zero, Reaum., it formed a buttery mass, white like snow, appearing like a collection of crystals confusedly jumbled together; it has an agreeable odour resembling that of the milk of almonds; its taste is pleasant.

This oil is soluble in cold alcohol, more so in boiling alcohol; six parts dissolving one of the oil. As the solution cools the cocine crystallises, the crystals being more pure in proportion to the quantity of alcohol employed in its solution. The cocine is the most remarkable principle of this oil; and when this latter is treated of (and it deserves a special notice), the cocine will be examined, and its properties detailed.

THE

London Medical and Surgical Journal.

Saturday, June 20, 1835.

OUR ABSTRACT OF THE EVIDENCE BEFORE THE SELECT PARLIAMENTARY COMMITTEE.

It will be seen by our readers that we have, in our present number, commenced an abstract of the evidence produced before the Select Committee on Medical Education in the House of Commons, during the last session. Nothing that has transpired with respect to our professional interests for the last century, can be imagined of more consequence to the medical practitioner than the evidence in question,—nothing more teeming with important matter, which he should ponder upon and study, so that the real position in which he stands may be perfectly understood and appreciated by him. The condition and prospects of medical science in the British dominions have been pretty clearly illustrated in the course of this inquiry, and facts elicited which, at the same time that they call for the most serious attention, are, to the cultivators of the medical art, many of them novel, and perhaps only to have been obtained through the searching ordeal of an investigation instituted by the highest authority. Let it be remembered, also, that the information thus gained will, in all probability, be the basis of whatever degree of reform shall be vouchsafed to the medical body by the legislature, and that, consequently, it should be as widely diffused among our professional brethren as possible. Acting, then, under an impression that it is most essential for the medical world in general to become acquainted with the truths, many of them reluctantly given to the light, which are contained in the evidence,

we shall, in succeeding numbers, give them in a condensed form to our readers.

In thus diffusing the substance of that knowledge, which, doubtless, our monopolising institutions would fain wish buried in the tomb of "all the Capulets," we consider ourselves performing a bounden duty to the profession to which we have the honour to belong, and discharging a trust which, as medical journalists, seems to belong to us.

In the performance of our task we shall lay before our brethren all that appears to us worthy of their consideration, having first divested it of the tautology and verbiage unavoidable in the course of such an examination. Matters of interest and importance shall be carefully preserved, and submitted to the perusal of our readers, while what is of a trifling nature, or carrying but little weight with it, shall be omitted. The solid grain shall be carefully sifted from the worthless chaff, and integrity and impartiality, in the process of condensation, be observed by us, so that when our labours are concluded a faithful and profitable digest of the whole may be in the possession of our readers.

THE POOR-LAWS COMMISSIONERS AGAIN.

A CORRESPONDENT from the neighbourhood of Reading informs us that a Commissioner under the Poor-Laws Amendment Act has addressed a letter to the Chairman of the Board of Guardians belonging to that district, in which, among other pieces of severe advice, he cautions the Guardian against being *too indulgent* to the poor. One of his choice sentences is to the purport that an impression should be made on the mind of the pauper that he is not an "annuitant" but a "beggar." How the learned Commissioner has come to the conclusion that a pauper is a *beggar*,

we confess we cannot imagine, having always ourselves considered that it was to prevent mendicity that the poor laws were framed. We can farther add that common sense and policy ought to have hinted to this satrap of an *imperium in imperio*, that to stamp upon the mind of even a *very poor man* the impression that he is a *beggar*, is not the most likely mode of keeping him off the sick list. Is this lord of the destinies of men who were born on the soil of England, and have a natural right to draw their sustenance from it, aware that the poor have an indefeasible right, aye, as much as he has to his ample salary, to claim, in the hour of their need, the aid and protection of their wealthier and more fortunate fellow-subjects? Is he aware that there are in existence immutable laws mightier far than the ephemeral dicta of self-styled legislators, and at variance with them, which will one day or other vindicate themselves? In charity to him we will suppose that he knows nothing of all this; but we may well conclude that if he possesses an atom of reflection, he knows that the Poor Laws system, under which he fattens and thrives, is calculated of itself to produce disease on an enlarged scale; that the packing and driving of whole families into a workhouse is a mode of begetting and propagating disease which it remained for the inventive faculty of the present era alone to adopt.

We are informed that one at least of the junta which holds a brief authority over the destinies of the poor has seen some foreign service. We ask him, has he ever witnessed the blighting effects following that prostration of mind and body which soldiers suffer after a defeat? Has he witnessed the irruption of sickness which almost invariably follows a disastrous retreat? These things he must have seen;

and can he doubt that the humiliation and degradation attending the indiscriminate huddling of fellow-creatures into a pauper barrack will have a milder effect on their worn-out minds and frames? We opine not; and, before another pamphlet appears, filled with sneers and heartless jests upon those whom fortune hath already too hardly used, we advise that a little more reflection and humanity be cultivated by the writers. Taken in a sanatory point of view, it is of the utmost consequence that the poor should be humanely treated. There is not among them generally, or in any particular quarter, a disposition to be dissatisfied with the laws. The people of England, and among them the poor, honour and obey the laws when they are founded upon the unchangeable principles of justice, but legislative quackery they eschew.

While on this subject, we cannot help applauding the spirit which has burst forth among medical men throughout the country, regarding the manner in which the Poor-Laws Commissioners seem disposed to deal with them. The only efficient plan of counteracting the sordid meanness which would inflict slavery not only on the poor but on their most indispensable attendant, the surgeon, has been adopted in many parts of the kingdom; and we doubt not but success will soon crown the endeavours of such of our brethren as become associates in the good work. Unions of medical men are spreading in every direction, and it is but reasonable to expect that their moral weight and influence will quickly counterbalance the unworthy efforts made in various quarters to degrade and undervalue our services, and therefore ourselves. The flames of discontent and dissatisfaction among the medical world, which the Poor-Law Commissioners have ignited, will, we trust, continue

to burn steadily, until the fuel which gave rise to them is consumed—until a more liberal mode of dealing with us is determined on by those who reap the benefit of our talents.

MEDICAL REFORM.

It is easy to perceive that nothing will be done this session of Parliament for the advantage of our profession. Its champions have enough of more weighty matter to engage their time and attention for the few remaining weeks, which will intervene before the close of their present campaign, and must, of course, postpone the consideration of our long-delayed and anxiously-expected reformation to a future period. It is probable that, in the next session, our hopes may be realised, and the muddy and incongruous heap of laws (so called) affecting the profession be exploded, and replaced by a more salutary code. In the meantime, let all the bearings and tendencies of the different questions relating to reform, which have been agitated pro and con in the medical world for these few last years, be sifted over again and again, so that a clear and comprehensive view of the whole may become familiar to all interested. This is the only way to arrive finally at a satisfactory conclusion, and to obtain a measure of relief which shall be well defined, simple, and efficient. The members of our science have of late made rapid strides towards gaining a thorough knowledge of their rights and privileges. Much has been achieved by them, but much remains to be done; and we exhort them strongly not to relax in their efforts to obtain justice and an honourable station for themselves. Let them persist; let their shoulders still press more unitedly and strenuously than ever the wheel their

energy has set in motion, and success will at no distant period crown their endeavours.

CORONERS' BILL.

THE disfranchisement clause in the Coroners' Bill, which goes to abolish the common law right of the forty shillings freeholders to elect the Coroners in their respective counties, was opposed on Wednesday night in the House of Commons. We are not aware of the provisions of the present bill, but trust the remuneration provided for medical men summoned to give evidence at inquests, and to undergo the drudgery of making *post mortem* examinations, is of a more liberal calibre than that contemplated in the bill introduced last year. Nothing can be more unreasonable and unjust than the mode in which the practitioners of medicine have hitherto been treated in these cases. Their time, difficulties, and often dangers in the fulfilment of an arduous duty have been set at nought, or, as in too many other instances where they are called in to serve the public, rewarded with a paltry pittance. Such is not the treatment which men of science have a right to expect, or which the legislature ought to permit.

TO OUR READERS AND CORRESPONDENTS.

IN answer to numerous congratulatory letters on the manner in which this Journal has been conducted, we feel it due to our correspondents to state, that after the present unrivalled course of clinical medicine we are at present publishing by Dr. Graves, we have the permission of that gentleman to publish, corrected by himself, a separate course, which he delivered last winter in Dublin on the stethoscope

and diseases of the chest, the real value of which we are sure our readers will justly appreciate. It will also be recollected that, in our prospectus for the present year, we stated that we should give a course of six lectures on embryology by Dr. Montgomery. Since then, this gentleman has been delivering another course on the same subject consisting of twelve, which, we are happy to state, will be corrected by the lecturer for this Journal, and published during the present summer. The other departments of this journal will, as usual, be filled with that interesting and scientific matter which has already raised it in the estimation of so many of our professional brethren.

OBSERVATIONS ON THE STRUCTURE OF THE BRAIN.

BY PROFESSOR EHRENBURG.

THE *Annalen der Physik und Chemie* von Poggendorff, No. 7, 1833, contains an essay by Professor Ehrenberg, of Berlin, entitled, "The necessity of a minute mechanical examination of the brain and nerves in preference to the chemical analysis illustrated by observations," in which there is given an account of some observations recently made by him with regard to the minute structure of nervous tissue, as seen by the aid of a very powerful microscope.

Many attempts of a similar nature to examine structure of that fibrous like texture which is in general seen in some parts of a fresh brain, and which becomes more obvious when the brain has been artificially hardened by steeping in alcohol or a solution of the muriate of mercury, or by boiling in oil, have been made ever since the microscope came into use, but these attempts have led as yet to very unsatisfactory results.

A hasty repetition of Professor Ehrenberg's observations has not shown us the appearances described by him, but the well-merited character for accuracy and skilfulness in the use of the microscope which that observer has acquired by his interesting researches on the structure and functions of infusoria, makes us hope that they may be found to be correct, and satisfies us that a short account of them will at all events be interesting to anatomists and physiologists.

The discordance in the accounts given of

the structure of the brain and nerves by Leewenhoek, Della Torre, Monro, Bauer, Home, and others, and the unsuccess which has generally attended their investigation, may in some degree have proceeded from unskilful management of the microscope on the part of some—from different modes of examination having been adopted by others, from a total ignorance with regard to the disposition of the elementary texture in which the nervous matter of the brain has been generally believed to be contained—from the supposition that has prevailed, that a fluid or mucous matter might constitute the matrix in which the nervous filaments are deposited—and from the circumstance that fibres of very different magnitude have been looked for in the nervous texture by different observers.

Professor Ehrenberg has shown that the proper nervous substance of the brain and nerves does actually consist of very minute fibres; and he informs us that these fibres can only be discovered by the aid of a magnifying power of three hundred diameters, and that he was sometimes obliged to have recourse to a much greater magnifying power, as eight hundred diameters, in order to bring them into view. He examined thin slices of the recent brain, and states that the fibrous structure was in general most obvious at the thin margins of the slices, when these were simply laid on the object glass holder of the microscope, and that gentle pressure of the nervous substance between two thin plates of glass generally rendered the fibres more apparent.

The great mass of the cerebrum and cerebellum consists, according to Professor Ehrenberg, of very minute fibres irregularly disposed in the cortical part, and there interspersed with globules and plates, converging as they pass inwards from the surface towards the centre of the brain. The greater number of these fibres have not a regular cylindrical shape, but present the appearance of strings of pearls, the swelled portions being situated at some distance from one another, and united by narrower parts which are continuous with them, and are formed apparently of the same material. Besides these fibres, which Professor Ehrenberg calls *articulated*, from their knotted appearance, this observer states that towards the base of the brain and crura cerebri, other somewhat larger fibres, of a regular cylindrical form, are to be observed, interspersed among the articulated or knotted ones. These two sets of fibres are not held together by cellular tissue, or fluid, or mucous matter, but appear to be nearly in juxtaposition with one another, except where they are penetrated by the net-work of minute blood-vessels which are every where distributed through the brain. The cortical substance seems, according to Ehrenberg's observations, to differ from the medullary or white substance chiefly in the want of the straight cylindrical fibres, and in the articulated fibres being contained in a denser net-

work of blood vessels, and being covered by a layer of free granules larger than the dilated parts of the knotted fibres.

In the brain, the fibres run for the most part parallel to one another; they are sometimes seen to cross, and, in a few instances, Professor Ehrenberg states that he has observed two fibres uniting into one, but never any distinct anastomosis.

The larger straight cylindrical fibres, he states, are manifestly tubular, because it is possible to see the inner parietes of the tube, and on dividing some of these fibres and gently pressing them between plates of glass, a granular medullary matter was made to issue from them. In the knotted or articulated fibres he never was able to discover a distinctly tubular appearance, nor could any matter be pressed from their interior; but notwithstanding this Ehrenberg considers these also as tubular.

Prof. Ehrenberg has observed a remarkable difference in the minute structure of some of the nerves of special sensation, the great sympathetic nerve, and the compound spinal nerves. He finds that the olfactory, the optic, and the auditory nerves, as well as the branches of the great sympathetic, are entirely composed of knotted or articulated fibres, similar in size and appearance to those forming the great bulk of the nervous matter in the cerebrum; while the nerves of motion, and the regular spinal nerves, are entirely composed of the straight cylindrical tubular fibres.

The cylindrical tubular fibres of the spinal nerves, and of the nerves of motion coming from the brain, are considered by Professor Ehrenberg as prolongations of some of the articulated fibres of the brain itself; for he has observed, at the origin of a nerve of motion, that the articulated fibres gradually lose their knotted appearance as they pass into the root of the nerve, and increasing slightly in diameter become the straight tubular cylindrical fibres proper to nerves of this description.

The net-work of the retina affords an excellent opportunity of viewing the articulated cerebral fibres, but in order that these may be well seen, there must be removed from their surface a layer of coarse granules, nearly of the diameter of the nuclei of the blood globules, and similar to those which cover the flattened extremities of the articulated fibres, at the surface of the cortical substance of the brain.

It remains still to be investigated, whether the knotted kind of fibres are only to be found in the nerves above mentioned, or are peculiar to all sensory nerves, while the cylindrical tubular fibres are peculiar to motory nerves.

British Hospital Reports.

NORTH LONDON HOSPITAL.

Clinical Remarks on Rheumatism and Dropsy.

BY PROFESSOR ELLIOTSON.

IN to-day's lecture, gentlemen, I wish to direct your attention to the subject of acute rheumatism. In the treatment of this disease it is of the highest importance to ascertain whether it is inflammatory or not; should it be so, it would of course be very improper to prescribe stimulating remedies for your patient, such as the tincture of guaiacum, &c.; on the other hand, should it be not inflammatory it would be equally injudicious to bleed and have recourse to other antiphlogistic means. So as to impress this on your mind I will narrate a case which this moment strikes me, being one in point. A gentleman was subject to attacks of gout, produced in part by good living, riding in omnibuses instead of walking, and other such causes. For some time he had been in the habit of taking a preparation of colchicum, which, in general, gave him much relief. Previous to his last attack some kind friend had recommended him to mix comfortable quantities of brandy with the colchicum. This he did, and as his gout was of an inflammatory character, of course he became much worse. At this period he sent for me; I found him abusing the certainty in the effect of medicines, and suffering much pain, the affected joints being very red and much swollen. I said to him, "I suppose you have been living on barley-water and slops?" "Oh, no," he replied, "I am taking a good deal of brandy-and-water, but from it I have found no benefit." I recommended him to leave it off, take colchicum, and live on low diet; and in the course of two days, when I went to see him again, he was out walking. During the winter I have had several cases of rheumatism in the hospital, and, on the whole, they have been speedily relieved and discharged.

The first on which I shall remark is that of John Tantley, a fisherman, aged 59, admitted March 6th. From the nature of his occupation you see he was very liable to rheumatic attacks. Nineteen years ago he had a very severe one, which was cured, and he did not suffer again until about ten weeks before his admission into the hospital. The large and small joints were both affected. When this is the case it is called *rheumatic gout*, because rheumatism affects the large joints, and gout the small ones. This case was decidedly inflammatory. Pulse 108, but as there was a good deal of sweating I did not bleed, but ordered him to take the following draught every six hours.

R Vin. Colch. ʒss;
Magnes. Sulph. ʒss;
Mag. Carb. gr. x.

In two days the pulse fell to 93, and the pains continued diminishing until the 20th, when he

was dismissed cured. In administering colchicum, I should recommend you to combine carbonate and sulphate of magnesia with it, as in rheumatism it is very essential to open the bowels early, and colchicum, if given in proper doses, seldom purges before two days, and also colchicum gripes most painfully unless it is so combined. If the bowels become too much relaxed, the sulphate may be omitted. There follows, I perceive, in the report-book one or two cases of a similar kind. David Cripps, admitted 12th of April. He had pains in the loins and spine, shooting to the scapulæ, also in the wrists and ankles, which were much increased by pressure: pulse 104, strong. He was plethoric, so I ordered eight ounces of blood to be taken from him, which was bled, and to take the colchicum, &c. as in the last case. After the bleeding, the pulse fell to 90, and he continued improving until the 29th, when he left the hospital, perfectly recovered. William Chaplain, a gardener, admitted May 3rd. He had the rheumatic pains first in the left arm, afterwards in the right, which you will frequently observe to be the case in practice. The pulse was 96, and very full, and he was bled to sixteen ounces, and had the colchicum, &c. The blood was very much bled and cupped. I do not know that there is anything else to remark in this case, except that he was dismissed cured on the 20th.

These cases you see are all precisely similar, and show you the benefit of treating the inflammatory species of rheumatism by depletion. The next case I shall refer to is that of William Taylor, aged 39, admitted May 26th. He had suffered from many previous attacks. You will find that, after a person has been affected by rheumatism, a much less exciting cause will reproduce it than at first produced it; and this very frequently increases, so that you will see many who suffer from it after the slightest cold or wet. His tongue was coated with a substance resembling the froth of glass, and you will find that in inflammatory rheumatism the tongue is either coated in this manner, or by a white mucus. He was bled to twenty ounces, and as he was very costive he had a drachm of the magnes. sulph. with the colchicum and carb. magnes. The pain soon left him, except in one shoulder. You will continually remark that the rheumatic pains continue in one situation long after they have left every other part of the body, and very generally it is in that part where they first commenced. You see it was so in this case. The shoulder was red, hot, and painful; there was evidently a good deal of inflammation. Local bleeding is very useful in these kinds of cases, so I had twelve leeches applied, which so relieved him that he left on the 12th of June, quite well. There are also some parallel cases in the female wards. Maria Clarke, aged 20, admitted April 23rd: pulse 96; she had the usual rheumatic pains. She was bled to eight ounces. She continued mending till the 12th of May, when her feet and wrists be-

came swollen and painful. Leeches were applied, and on the 26th of May she was dismissed cured. In inflammatory diseases, the feet frequently continue longer affected than the other parts, on account of the weight they have to support, and the gravity of the blood.

If the rheumatism be inflammatory, the treatment must be alike whether it be acute or chronic. I see there is a case here in the book. Turtell, a pale spare man, aged 50, affected by rheumatic pains in the limbs. When he was admitted, rheumatismus chronicus was placed on his card, afterwards phlogisticus was added. I gave him *vin. colch.* ʒss., *magnes. carb. gr. x.*, every six hours, and his pains soon disappeared. As he was weak and pale I gave him a tonic. After an attack of this nature, when from weakness it becomes necessary to support your patient, you must be careful in administering tonics not to give them too strong. In this case I gave him *infus. gentian.* ʒj., *liq. ammon. acet.* ʒss., three times a-day. I added the saline because it prevents the tonic from stimulating as well as strengthening him. You will find this to be a useful precaution. Well, he continued to improve, and the complaint being quite gone, I gave him a more decided tonic,—*ferri carb.* ʒij., *ter in die.* Soon after this, either from the change of the weather, which became very warm, or from a fresh cold, he was attacked with pleuritis, which, however, was very mild. He was bled to eight ounces, and had five grains of calomel and a few saline aperients, which soon cured it. After this he had inflammation at the back of the leg, which was removed by leeches.

You will remember the case of a pale thin woman, in the right hand ward, near the fireplace, who had what we call cold rheumatism. This species generally affects persons of a torpid and inactive temperament. Now, I have found, or I think I am finding, the hydriodate of potass a very excellent remedy for this affection. I gave her three grains three times a-day, which greatly relieved her, and though you might have heard her tell me just now that she still had pain in her feet, it was only because she did not keep them well up, but rested on them.

I had a case of ulcers of the throat in a man, which, although they appeared after impure connexion, I could not convince myself were syphilitic, and not wishing to give mercury without a thorough conviction of its necessity, I gave him three grains of the hydriodate of potass three times a day, and he was well in a week. I shall now refer to a case of local inflammatory dropsy. It was a woman, aged 60, in good health, and very fat; the urine was scanty and high coloured, and there was œdema of the lower extremities. As she was 60, I did not think proper to bleed her unless I was certain I could not cure her without, so ordered her *potass. super-tart.* ʒss., *pulv. jalap. gr. x.*, *pulv. zing. gr. x.* You will find that it is much better to

combine jalap with the supertartrate of potass, as it, combined with the ginger, helps to throw off the flatulence which the potass, being a very windy purgative, causes. Purges, you know, purge away not only the water and more solid excrements, but also the wind, therefore they are very useful to flatulent persons. There appearing ulcers in the legs, and there being so much of her, I had her bled to ten ounces, and you will be able to watch the result.

Lithotomy.

Richard Inwards, sixty-one years of age, admitted June 2, 1835, who states that he has been affected with difficult micturition for the last four years, and retention of urine has occasionally followed, but not of long duration, until the commencement of last year, when it continued without any intermission for the period of seven weeks, and then got perfectly well. During this attack, a catheter was retained in the bladder for the space of three weeks, without being once withdrawn.

A second attack of retention ensued at the early commencement of the present year, prior to which the urine was always bloody after walking. Again a catheter was kept in for three weeks, afterwards withdrawn for a few days, reintroduced, and kept in for a month. From the beginning of his sufferings he has perceived a sediment in his water, but he did not observe any mucus until last spring. On admission he complained of extreme pain along the course of the urethra, in the bladder, and occasionally over the region of the kidneys, with incessant desire to pass his water, which is attended with great difficulty and much suffering. All these symptoms, when admitted into the hospital, were much aggravated, through the introduction of a sound on the previous day. His pulse was 95, and moderately strong; his tongue clean, and the bowels were regular; his urine copious, and not tinged with blood, but containing mucus, and by applying heat is rendered slightly turbid, and an abundant white precipitate is thrown down by the oxymuriate of mercury (bichloride), which is redissolved in nitric acid. Specific gravity of the urine 1.015.

June 2. He was ordered an electuary composed of the balsam copaiabæ and pulvis cubebæ, which, acting too powerfully on the bowels, was discontinued, and a mixture containing the spiritus ætheris nitrici substituted for it, with colchicum and morphine at bedtime.

8th. Mr. Liston sounded him to day for the first time, and distinctly ascertained the presence of a stone.

10th. He feels better, and the urine is improving from the use of the above remedies.

12th. The urine has greatly improved, and the poor fellow feels much easier.—Ordered a dose of castor oil at bedtime.

13th. To-day the patient was led into the theatre, with his eyes covered, from his having

learnt that a considerable number of strangers would witness the operation, which he was not, Mr. Liston said, aware of, and it had made him somewhat timid; but this would soon be overcome, and he recommended silence, to keep him, in part, ignorant of the number of gentlemen who he was pleased to see were assembled.

Operation.—Mr. Liston first passed a sound into the bladder, to allow Mr. S. Cooper and Mr. R. Quain to satisfy themselves of the presence of a stone; afterwards, the curved staff was substituted, and the patient bound by the usual method adopted for the lateral operation of lithotomy. From the great depth of the perineum, the great irritability and capaciousness of the bladder, from its frequent overdistension with urine, the operator, we believe, anticipated having to encounter no small difficulties, whether real or imaginary we shall leave our numerous friends to judge for themselves when we have put them in possession of every fact. The first and second incisions were made, and the bladder entered, with Mr. Liston's accustomed adroitness, and a portion of the prostate gland divided, which was found to be exceedingly rigid, sufficiently so to turn the edge of the bistoury (straight), and to prevent the operator, after the forceps were in the bladder, sufficiently expanding the blades to seize the stone, and three different attempts were made to bring it within reach by the index finger and grapple it without avail. To overcome this obstacle, the operator enlarged the wound of the prostate gland in the original direction, so as to allow the necessary movement of the instruments in any direction or part of the bladder. The stone was then seized and extracted by the forceps, and with it a portion of the prostate, or, as Mr. Liston thought it to be, a new growth projecting from it, and to which, he remarked, the retentions of urine might in part be attributable.

This stone measured about one and a half inch in length and three quarters of an inch in breadth, composed of lithic acid and phosphate of lime. The operator, perceiving that a portion of its surface appeared somewhat triturated, conceived that there might probably be another, therefore carefully explored the bladder, and struck one with the searcher entangling the folds at the upper fundus of the bladder, and with no small difficulty brought it down by a long scoop, and then quickly removed it with that instrument to the finger. The second stone was rather smaller than the first, but of the same composition. The operation lasted ten minutes and thirty-five seconds, two minutes and fifteen seconds of which time were occupied in replacing the patient in his first placed and proper position, and allowing a short respite to him. Not above four ounces of blood were lost during and after the operation, and in about two hours afterwards the urine began to pass through the tube placed in the bladder for that purpose, clear and in a considerable quantity.

June 14th. On visiting him early this morning, we found him complaining of a slight pain in the back, and of being rather warm and thirsty.

June 15th. Doing well, and in much better spirits, so that we do not expect a single untoward symptom, which we attribute to the cool, masterly, and unflinching manner in which Mr. Liston performed the operation, and admirably overcame the almost insurmountable difficulties that presented, without the least unnecessary force.

The operator, after the patient was removed to his bed, said that every gentleman must be prepared to meet with great difficulties, like the present, which certainly surpassed all others that he had witnessed, and from the excision of a portion of the prostate he apprehended no ill consequences would arise; but, on the contrary, Mr. Liston begged it to be understood that he was no enemy to lithotripsy, provided those who practised it would not operate promiscuously on every case that presented, but rather select them, and by thoroughly cultivating it no doubt it would be found highly serviceable to our fellow creatures.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

Cataract.

THOMAS SMITH, aged 12, residing 67, New Compton-street, admitted January, 1835, into the Royal Westminster Ophthalmic Hospital, with congenital cataracts in both eyes. The cataracts have a soft flocculent appearance, and are of a blueish white colour, and, when the pupils are dilated by belladonna, are seen surrounded by a black transparent ring of vitreous humour, the growth of the lens having been evidently stopped. From his mother's statement it appears that the opacity was first noticed two years ago; that his vision had never been good, but that during this period it has been gradually getting worse. He can now readily distinguish large objects, and can see to read very large print, especially when the pupils are dilated. The operation of solution was performed to-day on both eyes, with the common needle. The cataracts were soft, and appeared to be chiefly capsular. Sol. belladon. nocte maneque.

Feb. 4.—Had no pain or inflammation from the last operation, and absorption has been rapidly going on, with corresponding improvements in vision. The operation was repeated to-day, and he returned home in a week.

May 11th.—In the right eye there is merely a ring of capsule left, which is not seen unless the pupil is dilated. The left contains a large portion which was broken up to-day. Cont. sol. belladon. oculo sinist.

15th.—Eye a good deal inflamed and painful to-day. Cuc. cruen. temp. ad $\frac{3}{4}$ vj.; pulv. calomel, st.; mag. sulph. $\frac{3}{4}$ ss. 4 tis hor.

18th.—Inflammation subsided, and the left eye nearly clear.

June 8th.—Eye quite clear, and vision excellent. Can see to read small print without using glasses.

WESTMINSTER HOSPITAL.

Fistula in Ano.

JAMES ADDICOTT, aged 27, residing in St. Anne-street, was admitted February 11th, 1835, into Burdett Ward, under the care of Mr. W. B. Lynn. He is a man evidently of the lymphatic temperament, and from his appearance may be pronounced a phthisical subject; but he says that he is not labouring under any affection of the chest more severe than a common cold. He is pale, and apparently much emaciated.

The fistula, or rather the local disease, commenced about three weeks since, a tumour having formed near the margin of the anus, which soon became an abscess, burst, and remained fistulous.

The operation was not performed until ten days after his admission, when his health was rather improved. There proved to be two fistulæ, which were laid open with the blunt-pointed bistoury, dressed, and the man sent to bed.

The recovery in this case was exceedingly slow, the fistulæ being very languid in throwing out healthy granulations; but he was not discharged until a considerable time after the operation had been performed.

It has been generally considered that cases of this kind, when there is an apparent or suspected disease of the thoracic viscera, are not proper for an operation, unless an issue or seton be established, inasmuch as it is supposed to be an effort of nature in causing derivation of the disease. It has, however, occasionally happened that these symptoms of ill health disappear entirely on the removal of the local complaint, and consequently the operation is not unfrequently performed with advantage. The practice of substituting an artificial drain in the system for the one set up by nature, is not so much followed in this country as on the Continent, few medical men paying sufficient attention to the doctrines of the humoral pathology.

There is at present in the hospital a woman, under the care of Mr. W. B. Lynn, who was admitted with syphilis, stricture of the rectum, piles, and fistula. The first of these, it is considered, has been removed by the administration of mercury, which has been thrice carried to pyalism since her admission. The fistula opened in the left buttock about an inch from the verge of the anus, and, on probing, it was found to pass high up, running up by the side of the gut. It was at first, from its situation, supposed to be a blind one; but a more careful and accurate examination shewed

it to communicate with the rectum, about an inch and a half from the orifice. The end of the probe was forced through, and a seton of silk being passed through its eyed extremity, it was drawn through and secured, with the view of causing it to ulcerate its way through, on the plan of operating adopted by Martin Van Butchell. It did not, however, succeed; and in a few days Mr. W. B. Lynn was under the necessity of passing in a bistoury, and dividing the gut. It was then dressed in the usual manner.

Contraction of the Integuments of the Arm.

Cornelius Flamston, ætat. 29, residing in Westbourne-street, Pimlico, was admitted into Burdett Ward, Jan. 27th, 1835, under the care of Mr. White. In the course of last July, he was seized with erysipelas phlegmonodes of the right arm, forearm, and hand, preceded by disturbance of the general health for two days previous. The disease proceeded as usual; incisions were not practised, but ulceration was allowed to take place, which was attended with great suppuration and sloughing of the cellular tissue. Cicatrisation was completed only some two months since, the scars being situated on the inside of the arm and forearm; they are very firm, and render the integuments tense and unyielding. One of them extends obliquely across the bend of the elbow, and has probably involved in it the fascia bicipitis, for the forearm is almost quite prone, and is semi-flexed on the arm; the man cannot either extend or supinate the limb, and has very little power of flexion. Passive motion can be excited to a very slight degree, nor is it unattended with pain; flexion and extension of the fingers are very imperfect, and attempts to render it less so give rise to pain. He can move the wrist-joint tolerably well. The cicatrices can be moved rather freely, and are evidently unattached.

He was admitted into the hospital with the view of dissecting out the cicatrices, and afterwards placing the arm in a better position while healing, on the same principle as the operation for contractions of the integuments after burns, the case being considered very analogous, but it was afterwards proposed to try first the effects of acting mechanically on the muscles and integuments, by attaching a heavy weight to the hand, so as to draw down and extend the forearm. This plan was accordingly put in practice, and with beneficial results; it was afterwards changed for the use of a flat board, on which the forearm and fingers were extended, and worked by the patient himself. By these means Flamston improved greatly; the forearm could not only be extended and supinated more freely by others, but he could also manage it himself, and had nearly regained the complete use of his fingers when he was dismissed. He was discharged on the grounds that he could employ passive motion as well at home as in the hospital.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification on Thursday, June 11, 1835:—Henry Gilbert Cory, Holsworthy, Devon; Robert Righton Griam, ; Joseph Henry Boon, St. Kitts.

MISCELLANEOUS.

Medical Degrees.—The degree of Bachelor of Physic has been conferred by the Cambridge University congregation on Mr. Alexander Roselle Browne, of Trinity College; Mr. Augustus Frederick Cooper, of Trinity College; Mr. George Kemp, of St. Peter's College; and Mr. Samuel John Jeaffreson, of Pembroke College, all in that University.

Leeds Medical Society.—The annual meeting of this Society was held at Scarborough's Hotel on Thursday, Dr. Hunter in the Chair. After the usual business had been transacted, and the officers for the ensuing year appointed, the members sat down to dinner, under the presidency of the Chairman, Mr. Wildsmith officiating as Vice. The greatest good feeling prevailed; and the advantages which have already resulted, and are still likely to result, to medical science in this district from this institution, were hailed with the utmost satisfaction by all present. The following gentlemen were elected members of committee:—*Mr. Garlick, Mr. Smith, *Mr. Batty, Mr. Nunneley, *Mr. J. Hey, Mr. Wm. Hey, jun., Mr. Ward, and *Mr. W. A. Jackson, Treasurer and Secretary. [Those marked with an asterisk were re-elected.

The situations of surgeons to the Lunatic Asylum and General Dispensary at Lincoln are both now vacant, and there is only one candidate for each.

Looking over some of the back numbers of the *Journ. de Chimie Médicale*, we were much amused at finding it seriously stated, in the report of the case of Webb, the publican, who was tried and convicted of manslaughter, for administering Morison's pills in a case of small pox, in which the patient died, that the proprietor *made public the formula he employed*; and, moreover, *acknowledged* that, in a case such as that under notice, the pills were likely to do mischief. It is added, that Webb was found guilty; and, although there was no reason to suspect him of any criminal intention (*malice prepense*), he was forthwith CONDEMNED TO DEATH; but, says the journalist, it is to be hoped this punishment will be commuted, as the jury determined to petition the king to that effect. We need scarcely remind our readers that the real punishment was a few months' imprisonment.

The statue of Esculapius, the work of M. Lanno, placed under the portico of the Clinical Hospital and Medical School in Paris, has been exposed to public view, and has a magnificent effect.

The *Journal of Louvain* announces that an hospital will be immediately formed, calculated to contain 500 beds, and to which patients of the district of Louvain will be admitted. The hospital, which will be completed in less than a year, will afford the students of Louvain one of the best clinical schools in Europe, and remove the only pretext for depriving Louvain of its university.

APPOINTMENTS.

Naval.—Messrs. K. R. Risk and Thos. Carroll, assistant-surgeon to the San Josef.

Military.—Assistant-Surgeon Samuel Tarrant to be surgeon of the Royal London Militia. Mr. John Spettigue to be surgeon of the First Devon Yeomanry Cavalry. Mr. Charles Irving to be assistant-surgeon of the 7th Foot, vice Munro, appointed to the 2nd Dragoons. Staff Assistant-

Surgeon Alexander Campbell to be assistant-surgeon of the 10th Foot, vice Hyde, deceased. Hospital Staff—To be Assistant-Surgeons to the Forces—Assistant-Surgeon Thomas Coke Gaultier, M.D., from the 48th Foot, vice Fryer, whose appointment has not taken place. Wm. Hutchinsou Allman, M.D., vice Campbell, appointed to the 19th Foot. George Anderson, gent., vice Renny, appointed to the 1st Dragoons.

General.—Mr. Hadwin, house-surgeon to the Lincoln County Hospital. Mr. Charles Cotton, house-surgeon and apothecary to the Lynn Dispensary. Dr. Edward B. Harman, physician to the Bath United Hospital. Mr. William Jones, jun., resident-surgeon to the Birmingham Dispensary.

Resignations.—Dr. Hardy, physician to the Bath United Hospital. Mr. Sudbury, surgeon of the Lincoln County Hospital. Mr. Hadwin, surgeon of the Lincoln Lunatic Asylum.

DEATHS.

Mr. Sandford, surgeon of the General Lying-In Hospital, York-road, Lambeth. Mr. Edw. Murray, resident surgeon-apothecary of the Nottingham General Hospital. Mr. Coombe, surgeon of the North Staffordshire Infirmary. Mr. Nathan Firth, of Queen's Head, near Halifax, surgeon. Mr. Baron Milne, of Cromwellside, Aberdeen, surgeon, formerly of the East India Company's service. Assistant-Surgeon Hyde, of the 19th Foot. In Brighton, Dr. James Weir, assistant-inspector of hospitals. Mr. Edward Munton, of Hull, surgeon. Mr. William Morgan, of Church-street, Carnarvon, surgeon. Mr. E. A. Jennings, of Leamington Spa, surgeon. Mr. John Campbell, of Dunse Sulland, surgeon. At Keith, N. B. M. A. Lawrence, surgeon, R.N. Mr. S. G. Coombe, surgeon, Newcastle-under-Lyme.

WEEKLY BILL OF MORTALITY.

London, Tuesday, June 16, 1835.

Abscess	1	Inflammation	27
Age and Debility	25	Inflammation of the	
Apoplexy	7	Bowels & Stomach	5
Asthma	15	Inflammation of the	
Cancer	2	Brain	4
Childbirth	4	Inflammation of the	
Cholera	1	Lungs and Pleura	1
Consumption	71	Insanity	4
Convulsions	33	Liver, Diseased	4
Croup	3	Measles	17
Dentition, or Teeth-		Miscarriage	1
ing	7	Mortification	4
Diarrhœa	1	Paralysis	6
Dropsy	19	Small Pox	14
Dropsy on the Brain	14	Stone and Gravel	2
Dropsy on the Chest	2	Stricture	1
Fever	8	Thrash	1
Fever, Scarlet	9	Tumour	1
Fever, Typhus	4	Worms	1
Gout	1	Unknown Causes	1
Hæmorrhage	4		
Heart, Diseased	4		
Hooping-Cough	6	Stillborn	14

Buried, Males 178 Females 183 Total 361

Increase in Burials reported this week, 48.

Correspondents in our next.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At Sir Patrick Dun's Hospital during the
Session of 1834-5.*

LECTURE XVII.

GENTLEMEN,—There is a patient, named Catherine Corbally, in the Chronic Ward, to whom I would direct your attention; she is not seriously ill, but there are two circumstances connected with her case worthy of notice. She was an attendant in a family residing in town, the mistress of which, a young and healthy lady, was attacked with symptoms of fever about three days after childbirth, and died. Her fever was irregular in its progress, and attended with rapid pulse, laboured respiration, early sinking of the powers of life, and an eruption, which was supposed to be miliary. Shortly before her death I was called in to see her; on examination, we found that the disease was malignant scarlatina; the case was completely hopeless, and indeed I believe that almost every female who got scarlatina after childbirth this winter died, no matter what might be the mode of treatment employed. The true nature of the disease, however, was not made known to the family until five or six days afterwards, when all the children and two maid servants took it. It was also remarkable that a person residing in the house, who had laboured under scarlatina before, was attacked with bad sore-throat about the same time. I advert to this circumstance, because it is a fact, that persons who have had scarlatina before, if closely engaged in attending bad cases of the disease, are very apt to get sore-throat. I know several medical men to whom this happened, and the same thing occurred to myself not long since, though I had scarlatina in the malignant form.

Another circumstance connected with this case is, that the patient complains of severe pain in one of her ears, accompanied with deafness. This occurrence is frequently ob-

served in similar instances; the inflammation spreads from the fauces along the Eustachian tube until it reaches the ear, and hence we find many cases of scarlatina attended with more or less lesion of the function of hearing. It is very probable that this girl also got cold, for there is a considerable degree of tenderness about the external ear and over the mastoid process. In a recent lecture delivered at the Meath Hospital, I impressed on the class the necessity of making a careful examination of the parts where earach occurs during the progress of fever; it is very often a treacherous symptom, and you will find in the works of Abercrombie and Itard several cases in which it preceded fatal disease of the brain. I do not intend speaking on this subject at present, but the case before us puts me in mind of a form of otitis which is frequently met with, and on which it may be necessary to say something. Otitis, like conjunctivitis and inflammation of the tonsils, is very apt to attack persons of a scrofulous habit, and it is sometimes of importance to be able to distinguish this from the acute otitis, which comes on in a healthy person, as the latter is sometimes found in connexion with disease of the brain, the former hardly ever. In scrofulous otitis, the means of diagnosis are drawn chiefly from the constitutional symptoms, the appearance of the patient, the obstinacy of the disease, and the sudden manner in which it gets better, and then bad again. I lately saw an excellent example of acute scrofulous otitis, in a young lady of a decidedly strumous habit, living in Eccles-street, and whom I attended, together with Mr. Leech, of Parliament-street. She was attacked with violent earach, accompanied with some otorrhœa and tenderness of the external meatus indicating inflammation. The pain, however, was intense, and far greater than the degree of inflammation seemed likely to produce; it remitted or nearly intromitted, coming on violently about the same hour every day, and continuing to occasion intense agony for a few hours. Low diet, fomentations, leeches frequently applied, cathartics, blisters, all failed to procure relief. The disease, finally, suddenly yielded to ten grains

of sulphate of quinine given daily. The difficulty in such a case consists in determining how long we ought to persevere in the antiphlogistic method, and when we ought to begin with tonics suited to the neuralgic portion of the disease, for, like scrofulous ophthalmia, scrofulous otitis is accompanied by a degree of pain by no means proportioned to the violence of the inflammation. The acute healthy otitis generally comes on after exposure to cold; it is attended with severe pain and considerable tenderness of the parts about the ear, and runs its course in a comparatively short period. Now, how is this acute otitis in the healthy subject to be treated? Recollect the disease is one of a very intense character; this pain is frequently agonising, and the tenderness and heat of the parts about the external meatus are very great; recollect, too, that it may, and sometimes does, usher in disease of the brain, and let your treatment be therefore prompt and energetic. Purge the patient briskly, put him upon low diet and antimonials, and apply leeches in successive relays to the external ears and over the mastoid process. In scrofulous otitis, on the contrary, the antiphlogistic treatment, both general and local, must be more cautiously applied, and must be sooner laid aside to be succeeded by the exhibition of tonic remedies. The greatest care and attention, however, is necessary before we decide to pass from one mode of treatment to the other, and we must be well convinced that we have sufficiently guarded against the danger of the brain becoming engaged in the inflammation, before we change to the tonic treatment; when we do, we must proceed at first cautiously, afterwards more boldly. Give the carbonate of iron or the sulphate of quinine, watching its effects, and increasing the dose as you proceed; and in this way you will succeed in arresting the disease and curing your patient. I would, however, strongly impress upon you the necessity of caution; feel your way, be sure that there is no active inflammation present, watch the effect of every dose you give; by doing this you will not, as some have done, run the risk of inducing fatal symptoms. In many of these cases it is hard to draw a proper line of distinction at first; adopt therefore the safe practice, and, though the disease be of an intermittent character, defer the use of tonics until you have removed inflammation; you only lose a little time, whereas, by having recourse to them at too early a period, you may do your patient irreparable mischief.

I shall now speak of the case of Christopher Nolan, which I trust you have all watched with attention. When this man came into the hospital, his condition appeared to be completely desperate, he has, however, not only rallied, but is now convalescing rapidly. It is unnecessary for me to enter into a detail of his case, as I trust you have all observed it through its different stages; I shall only

remark, that on his admission he was labouring under fever of the worst character, his body was covered with macule, he lay constantly on his back, and had low muttering delirium, was unable or unwilling to answer questions, his breathing was oppressed, his pulse rapid, small and failing, the powers of life awfully prostrated,—in fact, he was in a state of apparently threatening dissolution.

My first object was to rouse the sinking powers of the system, and with that view I adopted the following treatment. He was put into a comfortable bed, and heat was restored to the surface by diligently rubbing his trunk and limbs with warm flannel. I next ordered a succession of flying blisters to the neck, chest, and abdomen. I may observe here, that his chest was heaving, there was a general wheezing audible over the whole surface, and he had that peculiar livid expression of countenance and dusky hue of skin, which indicate an imperfect aeration of the blood. With the view of stimulating the oppressed action of the respiratory nerves, I had two blisters applied, one on each side of the neck, above the clavicle; after remaining on for two hours these were removed, and two more applied over the supra-mammary region, then over the heart and right side of the chest, and lastly over the epigastrium. In addition to this he was ordered to have wine and chicken broth, and the following draught was prescribed, to be taken regularly every second hour until symptoms of reaction began to appear.

R. Misturæ camphoræ, ℥j.,
Liquoris anodyni Hoffmanni, ℥ss.,
Spiritus ammoniæ aromati, ℥ss.,
Moschi grana octo.

In employing blisters in this case my object was to stimulate powerfully and in rapid succession the integuments of the neck, chest, and abdomen. This practice has in such cases been attended with very marked effects, and in ours proved extremely valuable. Its efficacy seems to depend, not on the discharge of serous fluid, or on any revulsive action of the blisters, but on the powerful stimulus applied to an extensive cutaneous surface. I may observe here, that, during the present epidemic, blisters have been one of our most efficient means of cure. In several bad cases I have blistered the nape of the neck, the chest, hypochondrium, and nearly the whole of the abdomen in succession, and often with remarkable benefit. In ordinary cases of fever, tenderness of the epigastrium, pain in the head, and derangement of the respiratory system, are best treated by the application of leeches, or even by the use of the lancet; but, in the present epidemic, I have observed that patients bear bleeding very badly, though practised at the commencement of the disease, and the same rule applies, though with less force, to abstraction of blood by leeches or cupping-glasses. As far as my experience goes, local

or general depletion should be resorted to with caution. I am not timid in the use of the lancet or leeches, but I have seen several cases of fever which terminated fatally, and these were chiefly cases where venesection had been performed at the commencement of the attack; and, with respect to leeching, I have found that those cases were very difficult of cure, in which, relying on my experience of former epidemics, I had leeches too freely for what I considered to be local congestion.

With respect to the general employment of blisters in fever, it is, I believe, a prevalent but erroneous practice to leave them on much longer than is necessary. I seldom let them remain on longer than four or five hours; I speak here of flying blisters, which are applied successively to the nape of the neck, interscapular region, chest, and abdomen. Sometimes two or three hours will be sufficient. It is true that a blister will seldom rise in this space of time; but, though you have no serous discharge, the moment the skin under the blister becomes red, every purpose is accomplished; if the blister be removed, and the parts dressed with spermaceti ointment, it will rise in the course of a few hours. By acting in this way, two important advantages are obtained, you prevent the formation of bad sores, and obviate the risk of dysuria from the absorption of cantharides. It is in many cases extremely wrong to leave a blister on too long, and yet we see them frequently permitted to remain on for twelve, eighteen, and even twenty-four hours. If you excite the vessels of the skin by rubbing the part with a little proof spirit or oil of turpentine before the blister is applied, it will rise in three or four hours, if not it can be again applied. From a number of experiments made at the Meath Hospital, I have ascertained that the time necessary for producing the action of a blister is much shorter than is generally imagined. In some cases three hours, in some even two were sufficient, and in almost every instance the irritation of the cutaneous surface was effected in four hours.

I have stated that in this case we gave wine and chicken broth. With respect to the regulation of diet, I may observe that, in the present epidemic, a light nutritious diet may be prescribed at an early period of the disease. After the fourth or sixth day, we are in the habit of giving chicken broth, light beer, and even small quantities of wine. I do not speak here of chicken tea, as it is termed, but of broth of good strength and flavour. There is another point with respect to nutriment which I would beg leave to impress on your attention. When you give nutriment, be careful in observing the usual periods of meals. The space of time to which I limit the giving of chicken broth, jelly, arrow-root, and other mild articles of diet, is from eight o'clock in the morning to eight in the evening. Always make it a rule that your patient shall take nutriment within the space of those twelve hours during which

he is accustomed to take his meals when in health, and allow him nothing but mild diluent fluids during the night. I am persuaded that I have seen much benefit derived from following this simple plan.

A few words in conclusion with respect to the stimulant draughts which we employed in this case with such remarkable effects. During the prevalence of those doctrines which attributed all fever to local inflammation, diffusible stimulants fell into neglect and disuse; but, since our knowledge has been rendered more certain and fixed by the results of a truer pathology, we have learned to estimate their real value. I do not by any means exaggerate when I say that I have seen many lives saved by a combination similar to that employed in the present case. Where there is great prostration of the powers of life, oppression of the nervous functions, and low, muttering delirium, I do not know of any remedy which can be prescribed with more advantage. You will, of course, while employing medicines of this description, attend to the state of the bowels.

In the mixture we have ordered, you will perceive that the principal ingredient is musk. Musk exercises a stimulant effect on the nervous system, without having any tendency to produce cerebral congestion or coma. Unlike those remedies which powerfully affect the nervous system, it does not produce intoxication or narcotism. Hence it is that musk proves such a valuable stimulant in cases such as I have described, where there is reason to apprehend congestion of the brain. At the same time that you prescribe musk, you should assist its action by blisters judiciously applied. They may be applied along the sides of the neck, or over the chest, to excite the nerves of the heart, lungs, and diaphragm; or you may apply them between the shoulders and to the back of the neck, where your object is to act on the brain and spinal marrow. In cases like this, the best places for applying blisters are the neck, region of the heart, epigastrium, and spine. The blister should be small, and you should make up for their want of size by successive applications.

I have only to add that the treatment adopted in this case succeeded in again rousing the almost suspended powers of the system, the patient rallied, and his fever assumed a much more manageable aspect. I was obliged, however, to have recourse to the tartar emetic mixture with opium, in order to produce sleep. This completed his cure; from the time of its exhibition everything went on well.

Two cases of dropsy in the Chronic Ward next claim our attention. Both have occurred in persons who have previously enjoyed tolerably good health, and in both the disease seemed to be unaccompanied by organic lesion of any important viscus. One of the patients, J. Austin, states that he has been ill two months before he came into hospital, and acknowledges that his illness was the result of long continued habits of inebriety. Careless

and intemperate in his mode of life, and frequently exposed to cold and wet, he got an attack of bronchitis, accompanied by a sense of constriction about the chest and difficulty of breathing. He was bled for this, and states that the bleeding relieved his dyspnœa; but about this period he remarked that an anasarous swelling appeared in his face, neck, and chest.

In this case, gentlemen, we have a specimen of the ordinary history of dropsy in this country:—first, intemperate habits, next exposure to cold, followed by bronchitis or pneumonia, and then dropsy commencing in the face, chest, and upper extremities. I have on a former occasion pointed out to the class the importance of observing in what part of the body dropsical swelling first appears, because, by doing so, we obtain a more accurate idea of its nature, and are furnished with a clue towards discovering its source. Dropsy is generally the consequence of organic disease of some deep-seated viscus. When it is produced by thoracic disease, as bronchitis, pneumonia, or affections of the heart, it is said that the swelling always begins in the face, neck, trunk, and upper extremities; when it depends upon chronic hepatitis, disease of the spleen, obstruction of the system of the vena porta, or disease of the mesenteric glands, the swelling commences in the abdomen, and then proceeds to the lower extremities; but when it arises from mere debility, the consequence of hectic fever, long-continued diarrhœa, or a cachectic state of the system, the effusion is first observed in the lower extremities, coming on in the evening, and again disappearing towards morning. The history of dropsical swellings, therefore, by informing us in what part they first appeared, is often sufficient to indicate the general nature of the producing cause.

When this man came into the hospital, his cough had disappeared, and there was not any unequivocal symptoms of disease of the heart, but he had considerable dropsical swelling of the face, chest, and superficial parts of the abdomen; his appetite was bad, and on examining his urine we found it loaded with albumen, and of the specific gravity of 1029. Though he had no fever or dyspnœa at the time, we commenced the treatment by general bleeding, because he was a person of rather robust constitution, and on account of his dropsy having originated in cold. In persons who are able to bear bleeding, and where the disease has commenced in an acute form, you may often commence the treatment of dropsy by a single bleeding with great advantage, even though there be no fever or local inflammation present. We next prescribed an aperient injection, to be followed by a vapour bath. I then, by way of trial, gave him an electuary containing some diaphoretic medicines, and found that it acted well on the skin, and that sweating could be easily induced. This furnished me with a key to the

after treatment. Whenever you find that sweating can be easily brought on in dropsical cases, you should obey the hint given by nature. You should not under such circumstances have recourse to mercury, or hydragogue purgatives, or diuretics; you are to open the passage which nature has pointed out, you are to encourage diaphoresis, and you may rely upon it that you will in this way effect an easier, safer, and more permanent cure than you could by any of the various modes employed for similar purposes. We therefore gave this man a powder containing four grains of Dover's powder and five of nitrate of potash three times a day. The Dover's powder is tempered by combining it with nitrate of potash, which is an antiphlogistic, and prevents the former from exercising a heating effect on the system. Having continued these powders for seven or eight days, we commenced the exhibition of opium in doses of half a grain four times a day, to be increased after a few days to half a grain every fourth hour. Under the use of vapour baths used daily, and opium to the amount of three grains in the twenty-four hours, the man has improved wonderfully, and the dropsical swelling is fast subsiding. Opium has here, you may have remarked, produced no bad effects. The tongue is neither dry nor furred, and it has not any of that appearance which is observed in persons who are in the habit of taking opium; his appetite is unimpaired, his bowels regular, and his strength undiminished.

Now why did I give opium in this case? The more advanced students will perceive that I have treated it nearly in the same way as I treat cases of diabetes; because I have taught, and have been the first to teach, there seems to be an analogy between chronic dropsy and diabetes, and because experience has proved to me that this mode of treatment is most likely to be attended with success. I shall not dwell on this point at present, as I have already published a paper on it in the *Dublin Medical and Chemical Journal*, to which I refer you, merely observing here, that opium and other diaphoretics increase strength, remove the dropsical swelling, diminish the quantity of albumen in the urine, and bring on convalescence without producing any bad effects on the head or digestive system. Dr. Osborne, Dr. Gregory, and Dr. Bright have asserted that the presence of albumen in the urine arises from a particular disease of the kidney, in which the whole texture of the organ is altered, it becomes hypertrophied, finally harder than natural, and of a pale yellowish colour. On the other hand, Dr. Elliotson, Dr. McIntosh, and myself, have opposed this view of the question. It is true that this kind of kidney is sometimes found to exist with an albuminous state of the urine, but this is by no means invariably the case. I have seen many cases of albuminous urine which yielded completely to the exhibition of opium, and this surely could not happen if

organic disease were present. And though the cases in which this has occurred are not very numerous, still the evidence is good, and it cannot be denied that such a state of the urinary discharge may and does depend on constitutional causes totally independent of disease of the kidneys. I have very little doubt that it is to such an origin the present case is to be referred, and I feel confident that we shall cure it with opium. I am anxious that you should attend to this case and watch the result, for the treatment is quite different from that employed by others. I say this without meaning to claim any originality, but I may be permitted to say that it is a mode differing very much from those generally pursued. It cannot be used in cases where fever or local inflammation is present, but when the local and general excitement has been subdued, or when the case is chronic and unaccompanied by quick pulse, or any symptoms of visceral inflammation, it may be employed with safety and advantage.

The second case is that of the patient Matthew Gray, a man of middle age and rather robust constitution. On admission he stated that he had been dropsical for about twelve days, and complained of cough, dyspnoea, constriction of chest, and feverish symptoms. His cough was hard, short, incessant, preventing sleep, and increased by every attempt at full inspiration. He had general wheezing, much oppression about the chest, and scanty expectoration of frothy mucus. His pulse was 81, soft and rather weak; he complained of nausea and loss of appetite, and had oedema of the lower extremities. On examining the chest, I found it sounded clear on percussion, and that the physical signs present were those of bronchitis passing into the stage of supersecretion. In addition to this there were symptoms of engorgement in the lower and posterior parts of the lung.

Here then we had a case of dropsy supervening on acute bronchitis. I therefore ordered him to be bled immediately, and afterwards to have cupping glasses applied over the congested part of the lung. The local abstraction of blood was followed by remarkably good effects; it relieved the cough and constriction of chest, and diminished materially the pulmonary congestion. I next prescribed the following mixture, of which he was directed to take one tablespoonful every hour.

R. Misturæ amygdalarum, ℥ij.,
Antimonii tartarizati, granum,
Nitratis potassæ, ℥ij.,
Tincturæ hyoscyami, ℥iss.,
Tincturæ digitalis, ℥ss.

A mixture like this is well adapted for such a case, it removes the febrile condition of the system, and by its demulcent and sedative properties allays the cough and bronchitic irritation at the same time that it determines to the kidneys. Those medicines which are termed demulcent, are frequently of great

value in the treatment of bronchitis; you will often derive more benefit from gum Arabic, spermaceti, almond emulsion, and the like, than from any other class of remedies. In the present case, we combined them with sedatives and narcotics; and as the remedies prescribed under such circumstances should be antiphlogistic, we added a grain of tartar emetic and two drachms of nitrate of potash. I have already spoken of the powerful antiphlogistic properties of a combination of tartar emetic and nitre, and dwelt on the benefits derived from it in many forms of inflammatory disease, so that it is unnecessary for me to say anything at present on the subject. It is obvious to all, that the tinctures were added on account of their sedative and narcotic properties, tending to remove irritation and induce sleep, of the want of which the patient complained. But you may ask me why I did not order opium: simply because the disease was in its acute stage, and at a period when opium is apt to produce excitement of the system, and aggravation of the local symptoms. Instead of opium I gave hyoscyamus, which neither increases heat, produces headach, nor checks expectoration; and to this was added digitalis, a narcotic possessed of considerable antiphlogistic properties. Of all the narcotics, digitalis may be given with the greatest safety in cases where antiphlogistic treatment is required.

It is unnecessary for me to follow up this case through all its details. It will be sufficient to state, that by gradually changing the nature of the treatment as inflammation declined, and particularly by the proper employment of powerful purgatives, I have succeeded in producing a rapid amendment in his symptoms. It may be, however, necessary to explain why I used purgatives, and in what way they were exhibited. In cases where extensive bronchitis has given rise to pulmonary engorgement and dropsy, when you have relieved the acute symptoms by bleeding, leeches, or cupping, and other antiphlogistic means, and when there only remain some wheezing, oppression of the chest, and rather copious expectoration, you will often effect a vast deal of good by the judicious employment of powerful purgatives. You will clear the chest, relieve the breathing, and diminish the dropsical effusion. In the present instance the patient took the following bolus:

R. Pulv. jalapæ — rhei — scammonie, āā,
gr. v.;
Elaterii, gr. ss.;
Bitartratis potassæ — sulphatis potassæ, āā,
3 ss.;
Syrupi zingiberis, q. s, ut fiat bolus.

This acted powerfully, and its operation was followed by marked diminution of the pulmonary engorgement and dropsical swelling. I have frequently endeavoured to impress upon the class the truth of an observation made by Dr. Paris; that in the exhibition of remedies

much better effects are obtained by combining several analogous remedies in small quantities, than by giving a single one in a large dose. By combining substances which are of the same nature, that is to say, which are individually capable of exerting the same effects on the system, we are capable of producing more decided effects, even though these substances be given in diminished quantity, than if we prescribed any one ingredient of the combination in a full dose. I refer to this general principle, in order to explain why I had recourse to so many different medicines, instead of employing a single powerful ingredient in considerable quantity. It explains why, instead of giving at once fifteen grains of the powder of jalap, I gave five grains of jalap, five of rhubarb, and five of scammony, and added to these half a grain of elaterium, and a small quantity of cream of tartar and sulphate of potass. With respect to elaterium, I may observe that it has been strongly recommended in those cases of dropsy where there is no irritation of the digestive system present. Its action on the intestinal tube is very energetic, and from the quantity of watery secretion which it generally brings away, it is of great utility in removing anasarcaous swellings.

These are the principal observations which I have to offer with respect to this case. I may mention, that as the patient complained much of restlessness we prescribed half a grain of morphia, to be taken at bedtime. This succeeded in producing sleep, a most important point in the treatment of all acute affections. We have now omitted the use of the more powerful remedies, and have prescribed to-day a decoction of Iceland moss with tincture of opium to act as a pectoral demulcent, and he has been allowed chicken broth and jelly. He is going on at present in a very satisfactory way, but it will be necessary to watch him carefully during his convalescence, and obviate the occurrence of a relapse. If discharged at present, and before convalescence is perfectly established, he would in all probability relapse, and soon become much worse than ever. Hence I intend to keep him here for a month or six weeks. As long as I have been attached to public hospitals, I have made it a fixed rule, in all cases where a cure was possible, to keep the patient until it was confirmed. Whenever I was obliged, under the pressure of urgent necessity, to dismiss a case before healthy action was completely re-established; or whenever patients left the hospital prematurely of their own accord, I have observed that such persons, particularly if placed in the lower ranks of life, and subject to the numberless accidents and exposures of poverty, almost invariably returned in a far worse condition than before. It is much better, though perhaps it does not make so striking an appearance in hospital returns, that a certain number of patients should receive all the benefits derivable from

such institutions, than that a greater number should pass through them in the year, and be hurried out of them in a state of imperfect convalescence. This observation particularly applies to Fever Hospitals, and is, I fear, too little attended to in this city. Certain I am, that a vast number of the cases of incurable pulmonary and intestinal disease which are admitted annually into the Meath Hospital, have had their origin during the state of debility in which the patients were when dismissed from a fever hospital. Improper diet, imperfect clothing, bad lodging, damp rooms, are borne by the constitutions of the poor with comparative impunity as long as they are in a state of health; but not so when they are debilitated by a recent attack of fever, treated or maltreated by active remedies, and dismissed from hospital in a week or ten days after the crisis has taken place. How injurious to persons so debilitated the change from the warmth and comfort of a hospital to the cold and desolation of a damp garret or cellar! Add to this, that many of them, at the time of their discharge, still evidently bear the marks of mercurial action in their system, and many have their hair very short in consequence of the head having been shaved during their illness. Hence many catch colds that affect the ears or eyes; hence many become deaf, and not a few get sore eyes; while the number of those in whom the sequelæ of the fever rapidly induce incurable chronic diseases is so great, that, were the balance of the account to be fairly struck, it would be found fever hospitals do less good to the public health than is generally imagined.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXVII.

Placenta Prævia—Puerperal Fever.

GENTLEMEN—In resuming the subject of my last lecture, you will recollect that I strongly deprecated any violent attempts to dilate the os uteri in cases where the placenta was attached to it, and pointed out to you the injurious effects which might thereby result. The question, therefore, is, what are we to do in a case of this sort, where the hæmorrhage is very profuse, the os uteri but little dilatable, and the placenta centrally situated upon it. In the majority of cases, the extent of the hæmorrhage is in proportion to the degree in which labour has commenced; so that where there are no signs of incipient labour present, the flooding seldom becomes very alarming, but generally, after little time, by the due

employment of cold, rest, and perfect quiet, goes off of itself; on the other hand, where it is very profuse, and threatens to continue to a dangerous extent, we shall usually find the os uteri soft, and more or less dilated. Where, however, it is rigid, and the hæmorrhage goes on unabated, we must use the plug, which, under these circumstances, will prove a valuable remedy. "If," says Leroux, "after the commencement of a flooding, we favour the formation of a coagulum by means of the plug, are we not aiding nature? It brings on labour much sooner, and the os uteri has time to dilate, without further loss of blood." When it has dilated sufficiently, which is easily known by the nature and manner of the pains, we withdraw the plug, pierce the membranes, if they had not been already ruptured, and either search for the feet, or, if circumstances permit, let the child come in the natural position. In his 94th observation, he gives a case where Nature herself had endeavoured in a remarkable manner to stop the hæmorrhage, by the formation of a large coagulum. "The patient had suffered from loss of blood for several days, without informing any person of it: the discharge had increased very considerably the day before, and she had been obliged to lie down about six in the afternoon, from excessive weakness. A neighbour, who was in the habit of sitting up with her, came at eight, and, being alarmed, went for a midwife, who not being at home, she came for me. I found the patient very weak, but she had sharp pains, which returned frequently. There was a large coagulum of blood between her thighs, with which the vagina was also filled. Pushing it to one side, I introduced my finger, and found, on the left side of the vagina, a portion of the placenta adhering to the coagulum, and which, from that reason, I had considerable difficulty in separating. I broke down the coagulum, as far as the os uteri, which I found fully dilated, and through which the head of the child was beginning to protrude. My first thought was to push back the head, and bring down the feet; but the discharge had stopped, and the pains being regular, I let the labour take its natural course." Besides the authority of Leroux, in favour of the tampon, we have that of Mr. J. Burns, and Dr. Dewees, two authors of high rank and estimation, upon this subject. With regard to the nature of the plug itself, Mr. Burns pursues the method recommended by Leroux, viz. of filling the vagina with a linen cloth; a method which, when compared to that of Dr. Dewees, appears both clumsy and difficult of application, and qualifies its use according to the quantity of blood lost, and the patient's strength. "If," says he, "the accoucheur has used the plug early and effectually, and the pains have become active, he has good reason to expect natural expulsion, and the labour must be conducted upon the usual principles of midwifery; but if the uterus be enfeebled by loss of blood, if the

pains are indefinite, if they have done little more than just open the os uteri, and have no disposition to increase, then he is not justified in expecting that expulsion shall be naturally and safely accomplished, and he ought to deliver."

In cases of hæmorrhage at so early a period of pregnancy as six months, the uterus is so small and inconsiderably developed, that it is nearly impossible to introduce the hand into its cavity. My father, in his *Essay on Uterine Hæmorrhage*, from the results of some cases at this early period, is disposed to think, "that when the uterus is too small for the admission of the hand, the expulsion of the placenta and fœtus will happily be timely effected by nature." "It is well known," says he, "that in the very early months instances of fatal terminations of floodings have been very rare, as abortion sooner or later puts a stop to the discharge. It has likewise been before observed, that in flooding at any period of pregnancy women seldom die, at least not in the first instance, unless a considerable quantity of blood has been suddenly lost. Now, as the danger of a great and sudden loss must obviously depend upon the size of the uterine vessels, and as the enlargement of these vessels is in exact proportion to the increased size of the uterus, it becomes probable that when the vessels have acquired such a magnitude, that when detached from the placenta they would bleed largely and suddenly, the uterus itself must have attained to such a capacity as to admit the hand for artificial delivery." Dr. Dewees, who seems to have met with several cases of hæmorrhage from placenta prævia at a very early period of pregnancy, recommends the tampon, especially where the hæmorrhage occurs so early as the sixth month, from the os uteri not being sufficiently dilatible, "for by it the woman's strength is preserved, pain is permitted to increase, and eventually, though tardily, the placenta and fœtus thrown off, and the flooding almost immediately controlled." Instead of using a cloth, Dr. Dewees merely introduces a piece of soft sponge, which has previously been wrung out of vinegar, and of which you will recollect I spoke pretty fully when upon the subject of abortion. When the plug is applied, no hæmorrhage can arise, as the uterus is already filled with the fœtus and liquor amnii: it also acts as a stimulus, and after a time the vagina throws it out; or if this does not take place, we may take it out, and we generally find the os uteri soft and dilated; if not, the vagina must be again plugged. Of this you will find a very excellent case in the 5th vol. of the *Dublin Hospital Reports*, by Mr. Cusack, where the plug was used with great advantage, until the os uteri was sufficiently dilated. On proceeding to turn the child, we should carefully avoid doing any part of it hastily: the whole process of it should be conducted slowly and deliberately. "Should the woman be very much exhausted before we commence our operations (says Dr.

Dewees), we should use additional caution in the delivery. It should be very slowly performed, and we should have at each step of the process assurances, if possible, that the uterus has not lost, or rather that it possesses, sufficient contractility to render the completion of the operation eventually safe, if performed with due and necessary care." "In this case (says my father), the extraction should be more slow, that the uterus may not be unable to contract by being too suddenly emptied. A moderate pressure on the abdomen from the hand of an assistant, as the child is coming away, will likewise be of use to assist the contraction." There is no occasion to hurry the delivery in placenta prævia, because the hæmorrhage generally ceases as soon as the child is turned. The inferior parts of the child now act both as plug and compress, and effectually control all further discharge. Above all, gentlemen, you must never despair, and say, "It is useless—it is too late to attempt turning," &c. Do you recollect what I told you when on the subject of uterine hæmorrhage from non-contracted uterus. There are two cases where we should never give up hope, viz. in uterine hæmorrhage and diseases of children. I remember a case of placenta prævia, where the syncope was so frightful that for some moments I was uncertain whether my hand was in the vagina of a living or dead woman: the vagina was perfectly powerless, and so relaxed, that it felt more like a wet bladder wrapped loosely round my hand than anything else; as to feeling the pulse, that was quite out of the question. No blood was lost during turning, and as the uterus gradually diminished in size as the child quitted it, slight signs of returning life appeared, the vagina began to recover from its state of atony, and by the time the child was born, she could be sufficiently roused to swallow, and answer questions. Under these circumstances, the uterus, by contracting, expels a considerable quantity of blood from its thick spongy parieties into the rest of the circulation, which in some measure will supply the loss it has sustained. Where the patient has fainted two or three times, we must not wait to plug the vagina. We shall also find the os uteri, under such circumstances, flaccid and yielding, although, from want of uterine contraction, it may still remain closed. If, however, the os uteri, despite of all this exhaustion, be still rigid and undilatable, the plug must be had recourse to. Besides giving the os uteri time to open, "the plug," as my friend, Mr. Ingleby observes in his excellent work on Uterine Hæmorrhage, "may be also useful in giving the system time to rally. Mr. Grainger, of Birmingham, on visiting a poor woman with placenta prævia, and apparently in a moribund condition, immediately filled the vagina and os uteri with linen cloths, and waited two days before he dared to hazard delivery, which he accomplished with an auspicious result." After the child is born there

is no fear of flooding, because the inferior segment of the uterus contracts more considerably after birth than the fundus.

Nearly until the beginning of the present century it was recommended, especially when the placenta was situated centrally over the os uteri, to bore through this mass and thus enter the uterus. This practice, however, is by no means advisable; it is much better to pass the hand *between* the placenta and uterus, and between the uterus and membranes without rupturing them, and having reached the feet, *then* to pierce them and bring down the feet. You will recollect, I trust, the rules which I gave you on this point when speaking of "Turning," and that it was Peu, in 1695; who had the merit of first showing the importance of not rupturing the membranes. In the last case where I turned the child (it was on account of the placenta being centrally over the os uteri) I succeeded in passing my hand up to the feet, which were near the fundus, without rupturing the membranes. The placenta before you, which came from a similar case, is torn nearly to the middle, but this was produced during the passage of the child.

There has been considerable discrepancy of opinion among authors upon this important point, although for my own part I cannot see how there can be a moment's doubt about it. I will state to you the objections against the practice of boring through the placenta as it is given by Dr. Dewees, because it is highly desirable that you should know the opinion of so valuable an author on these points: "We are advised," says Dr. D., "to pierce the placenta with the hand, but this should never be done, especially as it is impossible to assign one single good reason for the practice, and there are several very strong ones against it."

1st. In attempting this, much time is lost that is highly important to the patient, as the flooding unabatingly, if not increasingly, goes on.

2nd. In this attempt we are obliged to force against the membranes, so as to carry or urge the whole placental mass towards the fundus of the uterus, by which means the separation of it from the neck is increased, and consequently the flooding augmented.

3rd. When the hand has even penetrated the cavity of the uterus, the hole which is made by it is no greater than itself, and consequently much too small for the fœtus to pass through without a forced enlargement, and this must be done by the child during its passage.

4th. As the hole made by the body of the child is not sufficiently large for the arms and head to pass through at the same time, they will consequently be arrested, and if force be applied to overcome this resistance, it will almost always separate the rest of the placenta from its connexion with the uterus.

5th. That when this is done it never fails:

to increase the discharge, besides adding the bulk of the placenta to that of the arms and head of the child.

6th. When the placenta is pierced we augment the risk of the child, for in making the opening we destroy some of the large umbilical veins, and thus permit the child to die from hæmorrhage; this is also observed by Dr. Denman, who, although he recommends penetrating the placenta, yet he confesses there is rather more danger of losing the child.

7th. We increase the chance of atony of the uterus, as the discharge of liquor amnii is not under due controul.

8th. It is sometimes impossible to penetrate the placenta, especially when its centre answers to the centre of the os uteri.

The reason which my father has assigned for recommending perforation of the placenta is "that by this means not more of the placenta may be separated than is necessary for the introduction of the hand, and, consequently, that as little increase of bleeding as possible may be produced by the operation. *But if it be impracticable, as I have more than once found it, and it must ever be when the middle of the placenta presents to the hand, from the thickness of it near the funis, it must be carefully separated from the uterus on one side, and the hand passed till it gets to the membranes.*" We produce no more separation of the placenta from the uterus than merely allows the hand to pass, and what hæmorrhage might result from this is checked by the presence of the hand and arm of the operator acting both as a compress and plug. The same opinion is entertained by the celebrated Matthias Saxtorph of Copenhagen.

Little or nothing seems to have been known about placenta prævia in Italy till very lately. In 1772 Guatani published a work at Rome entitled "De Externis Aneurismaticis," in which he alludes to a case where a woman died after flooding in the ninth month, and on dissection he found the placenta adhering centrally to the os uteri; he attributes this unusual situation of it to her having danced too much. In concluding this subject, gentlemen, I have merely to remark that the child presents with the head at the beginning of labour in these cases just as often as under other circumstances, and that in women who have had this peculiar situation of the placenta once, there is no reason whatever for its appearing in subsequent pregnancies.

It is not my object, gentlemen, to enter into a description of every form of puerperal fever which has hitherto been observed, but merely to describe that species which, during the last few years, has been most prevalent in London, and which I have, therefore, had the most frequent opportunities of observing. It would doubtless be interesting to give you a short account of the different forms it has appeared under at different times and places; there is no lack of materials, I can assure you, or of variety in these materials; it is indeed

a party-coloured jumble of observations heaped together, not without intrinsic value, I own, but still in great want of a firm basis to rest upon. I am not sure if the present fashionable morbid anatomy of the day, misnamed pathology, has assisted so much in developing the real nature of the disease as has been supposed; it appears to me rather to have withdrawn the attention of practitioners from a close observation of the phenomena presented during life to the inspection of those changes which are to be found after death. They have rather sought to examine the effects of the disease at a time when it had attained such an extent as to be incompatible with life, than to investigate upon correct and physiological grounds the series of changes which were taking place during the earlier periods. In the valuable dissertation on the state of medical science, which has appeared in the Cyclopædia of Practical Medicine by my friend Professor Alison, of Edinburgh, I find some similar observations. "It is also an important practical error to fix the attention, particularly of students of the profession, too much on those characters of disease which are drawn from changes of structure already effected, and to trust too exclusively to these as the diagnostics of different diseases, because in many instances these characters are not clearly perceptible until the latest and least remediable stage of diseases; the very object of the most important practice is to prevent the occurrence of the changes on which they depend." "Accordingly," says Dr. A., "when this department of pathology is too exclusively cultivated, the attention of students is often found to be fixed on the lesions to be expected after death, much more than on the power and application of remedies, either to control the diseased actions, or relieve the symptoms during life."

The disease which I am about to describe to you cannot perhaps, strictly speaking, be called puerperal fever, being rather inflammation of the uterus, more especially its veins and absorbents. This affection generally makes its appearance on the second, third, or fourth day after labour, and varies considerably in the nature of its attack. In some cases it will be observed to come on suddenly, with scarcely any premonitory symptoms; the patient will be suddenly seized with severe griping pain in the lower part of her abdomen, generally extending more or less to one side, and usually preceded by a smart shivering fit. The uterus will be found hard, larger than natural, and excessively painful to the touch; the pulse quick, and usually small; the tongue covered with a thin white fur, becoming brown and thicker towards the back part; the countenance anxious. With all this the abdomen is neither hard nor painful on moderate pressure, not even over the uterus itself do we produce pain, until we begin to press so hard that the uterus becomes plainly distinguishable to the hand through the soft integuments. The lochia has either not appeared at all, or

has suddenly ceased to flow, and in all probability the secretion of milk has followed a similar course.

Or the disease may commence in a much more gradual manner, the after-pains will be remarked to increase in severity and duration, producing a considerable degree of pain over the whole abdomen, but especially the uterus, which, during the paroxysms, is harder than in the intervals. The pains are increased by the slightest pressure if *suddenly* applied, but if gradually increased the patient will bear a considerable degree of pressure, not only without complaining, but will even remark that the pain is, as it were, benumbed by it. If the hand be now suddenly removed, very severe suffering is produced; the pains become more and more constant, until they assume the uniform character of inflammation of the uterus, as already described, when the disease makes its attack suddenly. If the disease be not checked in its progress, the pain becomes more intense, and extends over the whole surface of the peritoneum; the abdomen swells from tympanitis, frequently becomes enormously distended, and is exquisitely sensible to the slightest touch; the skin usually becomes cold and clammy, although in some cases it is hot and dry to the last; the countenance more anxious; the pulse extremely rapid and feeble, and frequently irregular; the stomach excessively irritable, continually rejecting its contents, to the great aggravation of the patient's sufferings; the tongue is encrusted with a thick, brown fur; the lips and teeth are covered with sordes, or sometimes it is of a deep brownish-red colour; the surface smooth and very dry, and a diarrhoea frequently comes on during the last stage of the disease.

The rest of this subject, gentlemen, I must delay till our next meeting.

ON THE BITTER MANIOC, WITH ANALYTICAL EXPERIMENTS ON THE JUICE OF THE ROOT.

BY M. O. HENRY.

THE manioc, *Jatropha Manihot*, *Janipha Manihot*, of the family of the *Euphorbiaceae*, is a plant indigenous to America, and is cultivated from Florida to the Straits of Magellan, as well as in many parts of Asia and Africa. The root of this plant in fact is one of the principal sources of food. There are two kinds of manioc carefully cultivated, the *sweet* and the *bitter*, from which different products are obtained; the bitter manioc especially, notwithstanding the very active poison which it contains, appears to be mostly employed, and the more valuable for its products; it is well known that this dangerous poison, the rapidity of the action of which has been long since recognised, is dissipated and destroyed by heat, and that

it is easy to obtain from the vegetable a substance proper for the nourishment of man and animals. All writers on natural history agree as to the method of proceeding in obtaining these alimentary products, so that I shall confine myself to a few details on the subject, which I hope will not be devoid of interest, as they have been carefully collected on the spot. I owe them to the great kindness of Dr. Sureau, my friend and brother-in-law, who, having resided between ten and twelve years at Saint Domingo, has seen the extraction of the alimentary matter sufficiently frequently to enable him to detail the process with correctness.

The *janipha manihot* consists of two kinds, as has been already observed; the one *sweet* and not poisonous; the other *bitter*, containing, in addition to the alimentary principle, a violent and subtle poison; the latter is the most frequently met with.

It is rather difficult to distinguish between the roots of these two varieties; still, by a careful examination, we shall find woody filaments near the centre of the roots of the sweet manioc, which are not met with in the bitter manioc; besides, the former becomes soft under dry or moist coction, while the latter does not undergo any such change, but remains hard. The preparations from either kind are *cassava*, *farina of couscousses*, and *tapioca* *.

In order to obtain the cassava, the roots, when they are as thick as the arm, are washed, and then submitted to the action of a coarse grater, after which the pulp is expressed into bags of different kinds. Pressure is exerted on these by stones or weights, and the fluid which exudes is received into vessels placed beneath. This being done, the cassava is made into bread, by taking the pulp after it has been well pressed, extending it on iron plates in layers of from one to two inches thick, and cooking them in the form of large cakes, which are then left to dry.

The root of the manioc furnishes a large quantity of fecula which is prepared in the ordinary manner, and sold in the colonies under the names of *starch*, *cipipa*, and *moussache*. The washerwomen use it as starch, but prefer the fecula of arrow-root, which they improperly call *sago*. It is necessary that the medical practitioner in those countries should ascertain whence the starch is procured which is employed in enemata, as very serious consequences have resulted from the use of that made from the manioc, which probably had been badly washed.

The parts of the pulp which do not pass

* In the *Dictionnaire des Sciences Naturelles*, vol. xxiv., and in the *Journal de Pharmacie*, vol. iii., mention is made of other products of manioc, used either as food or condiments, viz. *langou*, *cabiou*, as well as certain fermented drinks, to which are given the names of *ricou*, *cachivi*, *paya*, *vouapaya*.

through the canvas are dried, lightly roasted, and then pounded to make the grosser flour, called *farina de couscouse* or *tapioca*. This, boiled with milk, is excellent nourishment.

The root of the bitter manioc is, as has been already said, very poisonous, and by the remarks already made it will be seen that its poisonous principle resides in the juice; this principle appears to be very volatile, and its penetrating odour resembles very strongly that of hydrocyanic acid. Nevertheless, although the juice of the bitter manioc is so dangerous, the negroes frequently apply large pieces of the fresh pulp of this root on extensive ulcers, without experiencing any other sensible effect than a marked improvement of the wound. It is probable therefore that if hydrocyanic acid enters into the composition of this poison in the proportions which the odour of the juice and the volatility of the poison would seem to indicate, the pulp certainly could not be applied with impunity on such large surfaces, even taking into account the minor degree of vitality of the parts, for it is only employed on old fungous or callous ulcers.

With regard to the toxic action of the juice of the bitter manioc, M. Sureau has furnished me with the following anecdote, which appears to be sufficiently interesting to deserve mention:—

It is well known that the slaves in the colonies occasionally attempt to commit suicide. A *juge de paix*, of the commune of Cavaillon, in St. Domingo, the son of a physician, and himself very well informed, was M. Sureau's informant. He stated that previous to the revolution he was one of the inspector-generals of culture; while making his rounds he arrived at a house where a negro had just swallowed some manioc juice. Fearing the influence of this example, which was generally followed by other suicides, he ordered that the slave, who was already suffering from the effects of the poison, should be flogged. The unfortunate wretch was given up to the inexorable overseer, who pursued him through the court, armed with the fearful whip. The dragoons of the inspector's escort joined in the pursuit, and the poor fellow, in endeavouring to avoid the whip, ran about from place to place, leaped, and rolled on the ground. When he had been well flogged, he was expected to die from the effects of the poison, but to the general satisfaction he escaped with no other consequences than the flogging.

About a month after, another negro, residing in the neighbourhood, poisoned himself with manioc, and one of the dragoons who was present at the first case, chanced to be near at the time, and recommended the same remedy, which was put in force; the man was severely flogged and cured.

Pigs are very greedy of manioc, and while the cassava is in preparation they will frequently deceive the vigilance of the workmen, and drink the juice in the pots. When this occurs, they are driven about for an hour so

as to fatigue them greatly, by which their lives are saved.

It would be easy, says M. Sureau, to give a satisfactory explanation of these facts. In general, absorption takes place in an inverse ratio to the degree of strength and vital activity. It is in this manner that individuals, enervated by physical and moral causes, are readily affected by contagious complaints. Those, on the other hand, who lead an active life, who are endowed with great moral energy, or a certain degree of carelessness, are less exposed than others to contagious miasmata. There has not occurred any epidemic in which this may not have been remarked. Medical men have attended to this physiological observation; and whenever they are desirous of introducing any medicine into the system, they facilitate absorption by a debilitating regimen.

There cannot be any doubt but that, in the case alluded to, the running, flagellation, and the struggles of the patients, especially assisted by the heat of the climate, by accelerating the circulation, produce abundant diaphoresis, and thus prevent absorption of the poisonous principle.

The facts which have just been narrated, and others which have been fully proved, cannot leave any reason to doubt the toxic properties of the root of the bitter manioc. Its active principle seems to reside in the aqueous part extracted by expression, and it appears to be very soluble and volatile or destructible by the coction which the pulp undergoes in the various alimentary preparations. It is therefore of some importance to ascertain the nature of this principle by analysis as far as possible. M. Soubeiran and Pelletier have already examined a little of the juice of the *Jatropha Manihot*; but doubtless, in consequence of the small portion on which they operated, the distilled juice only presented the odour of bitter almonds, without any trace of hydrocyanic acid, with uncrystallisable sugar, and an osmazomic, azotic substance. Having received from M. Sureau a bottle of the juice of the bitter manioc, sent with the greatest care, together with the distilled water of the same plant, I determined to submit these products to different experiments, in the hope that the juice, although readily changed, would still present some interesting peculiarities and remains of the active principle. The distilled water not having afforded any traces of prussic acid, or anything remarkable, I shall pass at once to the analysis of the juice of the bitter manioc.

Analysis.—This liquid, obtained by expression from the fresh pulp, was of a greenish yellow colour, not thick, translucent, especially after filtration, which separated certain amylic particles mixed with gluten. Its savour left a slight bitterness, and at the same time had a rapid and not disagreeable taste. Evaporated in the open air, it furnished small crystallised grains very distinct.

Re-agents showed the presence of a small quantity of lime, and also a rather strong acid. Alcohol produced white viscid flakes, and precipitates were obtained both by barytes and the nitrate of silver.

The juice was exposed to the action of heat, when a sensible prussic acid odour was disengaged, followed by another very pungent one. In order to appreciate the nature of these volatile principles, I carefully collected the vapours in a diluted solution of nitrate of silver. White flakes soon formed, which were collected in a watch-glass, washed with alcohol and water, then treated with hydrochloric acid, and disengaged an odour of cyanogen, which could not be mistaken*. There exists, then, in the juice of manioc either hydrocyanic acid or a principle capable of producing it. The vapours continuing very sharp, and no longer disturbing the salt of silver, were collected in pure water, which soon became very acid.

I was desirous of ascertaining the nature of this fluid, to see if formic acid was produced either by prussic acid or by some peculiar cyanic radicle pre-existing in the juice of the manioc. With this view, the acidified water, neutralised by caustic soda, was carefully evaporated to dryness; the salt which resulted, heated in a small tube with the deutoxide of mercury, did not present the well-marked characters of the formiates, namely, the separation of metallic mercury and carbonic acid. The salt, treated by sulphuric acid, gave very pungent vapour of acetic acid. This acid, therefore, existed in the juice of the manioc which was examined, which was probably owing to some change in the saccharine principle of the juice, occurring while it was bottled.

The matter remaining in the retort after this operation had acquired a brownish tint; there still remained some free acid, and its bitter taste, which had become more marked, showed the presence of osmazome. It was slowly evaporated in a marine bath to the consistence of syrup, and while this was going on, the odour of acetic acid was still noticed. The thickened fluid when cooled soon became a solid mass, which was collected on a piece of linen, strained, pressed, and washed in alcohol. The result was a whitish mass, marked A. A. to which I shall return.

The liquids obtained from the straining and alcoholic washings being mixed together, concentrated again in a marine bath, were bitter, very acid to the taste, and irritating to the throat; the osmazomic odour was very strongly marked. Finally, by means of yeast, fermentation took place to a certain extent, while the acid which remained was entirely neutralised.

* I have performed a comparative experiment on a certain quantity of cherry-laurel water (not acid); the flakes formed by the nitrate of silver, washed very carefully with alcohol and with water, gave out, on the addition of hydrochloric acid, a very strong odour of prussic acid.

There remained then, after these various experiments, a mixture which it was very difficult to separate, but which consisted principally of a bitter acrid principle, acetic acid, vegetable osmazome, or that which is generally called such, a substance in itself very complicated, and, finally, traces of sugar.

In regard to the whitish deposit A. A., of which I have already spoken, after being washed with alcohol, it was dried at 100°, when it became pulverulent, then being dissolved in warm distilled water, and filtered, only a very small quantity of insoluble phosphate of lime remained; the solution of the salt was limpid, without colour or sensible savour; when treated with re-agents it did not indicate the presence of any free acid; the oxalate of ammonia did not form a light whitish precipitate until several instants had elapsed. *Caustic soda* gave a white gelatinous precipitate; *ammonia* a light flocculent precipitate; the *phosphate of soda* rendered it somewhat turbid, which, on the addition of ammonia, became more evident; the *acetate of lead* and *nitrate of silver* produced only a slight turbid appearance; the *corrosive sublimate*, the *proto-nitrate*, and the *red oxide of mercury* were tried, but there were no indications of a formiate; *alcohol* caused a sufficiently large precipitate; the *muriate of barytes* also caused a very evident precipitate.

The solution, evaporated at a gentle heat, left a brilliant, white, crystalline, neutral salt, in small needles, slightly efflorescent in the air. This salt, calcined in a platina crucible, was soon decomposed, giving off the odour of burnt bread. After long-continued calcination, there remained a white residue, which was recognised as magnesia, of which there was about 38 or 40 to 100 of the salt.

A portion of this organic salt having furnished a white precipitate with the muriate of barytes, it was carefully washed, and then, by means of diluted sulphuric acid, small silky needles, soluble in alcohol, were obtained. I believe that this salt, having magnesia for its basis, contains a peculiar *organic acid*, if I may judge by comparing it with the *citrate*, *malate*, *formiate*, *acetate*, and *tartrate of magnesia*, but I had too small a quantity to ascertain its character; therefore I shall not give this acid the name of *maniotic acid*, until I shall be able to examine it more carefully from some fresh juice of the bitter manioc.

From the results of this chemical analysis, I should consider the juice of the bitter manioc which was sent to me as consisting of—

Hydrocyanic acid, or at least a principle capable of producing it.

Acetic acid, doubtlessly formed from the sugar, which is one of the primitive constituents in the manioc.

An inorganic salt, having magnesia for its basis, the acid of which appears to be peculiar (*maniotic acid*).

A bitter acid principle, irritating the throat, very soluble in water and alcohol.

A brown, complex matter, equally soluble, having an osmazonic odour and taste, mixed with traces of fermentile sugar.

Certain insignificant salts, especially the calcareous phosphate, and, finally, remains of amylaceous fecula and gluten, forming an insoluble precipitate in the unfiltered juice.

CASE OF POISONING BY THE EXTRACT OF BELLADONNA.

RECORDED BY M. A. LAURAND, M.D.P.

EARLY in the month of last September, about four in the afternoon, Madame M. called on me to request I would visit two of her children, who, she said, evinced symptoms of madness for some hours past. When I reached her house, I found a boy about nine years old on the bed, and a little girl about eighteen months old by his side: they were both lying on the abdomen. The young boy, Alfred, had the eyes brilliant, but fixed; countenance animated, and expressive of joy and astonishment; lips dry, rather black, and yet the tongue was of a reddish colour and moist; the limbs were continually in motion, and he was constantly endeavouring to catch butterflies and other insects which he thought he saw upon my clothes. The little girl was still more agitated, her features more injected, lips drier and more black; the whole body was of a red colour, a symptom which did not occur with her brother; she was constantly shaking her head, and then letting it fall carelessly, as if tipsy; she played all sorts of tricks, calling her father, mother, and brothers, and that very distinctly, which surprised the whole family, as it was the first time she had ever spoken plainly. In both the children the pulse was very rapid, the pupils dilated and motionless, the conjunctiva of a well-marked bluish tint; they passed occasionally blackish, thick, thready mucus by the mouth; the little girl had sometimes nausea, but it never amounted to vomiting; pressure on the neck, chest, or abdomen, did not appear to cause pain, but, on the contrary, to excite laughter, and to prove a source of amusement.

My first thought was that these little patients were tipsy; but, after having examined them with attention, I no longer doubted that these symptoms arose from the ingestion of some deleterious substance; but the little girl had not eaten anything for two days, and the boy had breakfasted with his brothers, partaking of the same food, and they were perfectly free from indisposition. As it was more easy to ascertain what the little girl had taken, inasmuch as, on account of illness, she had not left her bed for several days, I inquired what she had had since the morning, which proved to be two cups of pectoral infusion, and one of the pills I had ordered the preceding evening. Madame M. had consulted me the day before concerning an attack of pertussis, under which

the child laboured, for which I prescribed as follows:—

R. Extracti belladonnæ, grana duo,
Extracti glycyrrhizæ, scrupulum unum,
Misce bene, et divide in pilulas duodecim.

Three of these were to be given to the little patient in the course of the day.

I desired to see the pills, and was not a little surprised at finding boluses weighing at least fifteen grains each. Certain that these were not made according to my directions, I went immediately to the individual * who had dispensed them, and desired to see my prescription. I read it to him, and it was exactly as previously stated. I pointed out, therefore, that in accordance with the quantities ordered the pills ought to weigh only three grains each instead of fifteen. "Ah, sir!" was the reply, "we have made a mistake; two drachms † of the extract of belladonna have been used, instead of two grains." Horrorstruck at this error, and dreading the fearful consequences which might result, I returned directly to my patients, and asked again to see the boluses. Twelve had been sent, and only nine remained. The little girl had certainly only taken one; there were then two wanting. I ascertained at last, by repeated questions, that Alfred had fetched them, and only brought back ten. There could scarcely be a doubt, then, but that in returning he had, through gluttony, swallowed the other two. I endeavoured to obtain an acknowledgment from him to that effect, but in vain. He stammered, laughed, and his parents also laughed; but I could not join in their amusement; and, hurt by its inopportune expression, I could not avoid saying—"Your children are poisoned, and your laughter gives me pain."

It was now 5 in the afternoon: the little girl had had her bolus at 9 in the morning, and it is probable that her brother had swallowed the other two, which doubtless contained 24 grains of the extract, a short time previous. Judging, then, that the belladonna would, in the course of eight hours, have produced the greater part of its deleterious effects, and that it would be useless to seek its evacuation from the alimentary canal, even by purgatives, I contented myself with ordering a draught containing ether, and drinks acidulated with vinegar. While these were preparing, I required more minute information as to the symptoms which had presented themselves since the ingestion of the belladonna, and I received the

* This individual was not a chemist, but one of those charitable persons whose philanthropy is not very enlightened, and to whom society grants the double and dangerous privilege of taking care of both body and soul.

† The French drachm consists of 72 grains, is written *gros*, and its contraction may, by persons unacquainted with professional hieroglyphics, be mistaken for grains, and *vice versâ*.—Eds.

following particulars. About half-past ten, the little girl was observed to squint: she appeared to be fatigued, would shut her eyes for a few moments, then slowly half-open them: she seemed in the condition of one who was struggling against sleep. Alfred did not show any peculiar symptoms until about noon, when he was exceedingly lequacious, contrary to his usual custom: his look was heavy, and he also squinted. Soon after, his speech became slow and embarrassed, and he tottered in his gait. In walking, he constantly lifted up one leg, as if to pass over a little hill, which he apparently thought was before him, and then fell, without being able to get up again. He was then put to bed: he laid down, as his sister did, on the abdomen, the head raised, the chin resting on the hands, and as in a posture of contemplation. Inattentive to what was really said and done in the room, his eye was cast around him in all directions, and he called out that he saw rats, mice, cats, stewpans (large black animals), worms crawling on the walls and furniture, with various other objects, but all of a sombre character. These dark hallucinations continued until 4, when his body, which had previously been almost cold, especially at the extremities, began to get warm; his features became animated, and assumed colour; the eyes lively and brilliant; the speech brief and distinct; hilarity and jovial songs took the place of the previous depression. It was just at this time that I was called in. The young patient was singing open-mouthed. When he was asked, "What is the matter with you—are you in pain?" He answered impatiently, complaining of the abdomen, and repeating it five or six times. In general, his replies were very laconic and dry, but correct. It was found very difficult to withdraw his attention, which seemed to be fixed on objects before him. He was constantly exclaiming—"Oh, what splendid diamonds!—what beautiful suns! Turn those cocks, or all the water will run off!" He seemed, from one moment to another, attracted by fire, sparks, illuminations, flying candles, stars, beautiful birds, butterflies, glow-worms, &c., &c.: he was in ecstasy, and appeared to be most happy. The symptoms of poisoning had followed very nearly the same course in the little girl as in her brother, that is to say, at first depressed, pale, cold, and nearly fainting, she had, like him, about 3 or 4 in the afternoon, experienced general re-action. A scarlet eruption took place almost suddenly over the whole body, and more especially on the face and thighs, and simultaneously with this eruption the faculties were over-excited. Neither of the children, notwithstanding the intense heat from which they appeared to suffer, gave any indication of thirst.

At six o'clock, the medicine was administered, and the acidulated eau sucrée. At this time I left them, and returned again about 9, when I found that the girl had taken scarcely anything, and yet she was better than her

brother, who had taken both draught and drink: nevertheless, they were both very much agitated, but less than when I left. Alfred had made water three or four times; but he was again complaining of the abdomen, and his feet were cold. I ordered him to have the acidulated drink less frequently, and a large and thick hot linseed poultice over the abdomen, with sinapisms to the legs. An emollient poultice was also applied to the abdomen of the sister. About midnight the latter became sleepy; her gestulations then were only momentary; the eruption became paler, and the head less hot. About two she fell asleep, and did not awake again till five, when she had a copious, greenish, badly-smelling stool. From this time she appeared to be out of danger, and, indeed, she only had a few fits of gaiety and agitation afterwards, at prolonged intervals. All symptoms of poisoning had disappeared by the evening, when she had some milk, passed a good night, and the next day, forty-eight hours after the ingestion of the belladonna, she was quite well. It is worthy of remark, that the whooping-cough returned the day after with its accustomed violence.

Alfred's agitation continued the whole night; the hallucinations had again become sombre; and he had risen several times from fear, thinking he saw around him large black animals, dogs, cats, rats, &c.; he had some convulsive motions and grinding of the teeth. When I saw him in the morning between seven and eight he was much calmer, the delirium and hallucinations returning only every half hour, and lasting but a short time. He made water frequently, and did not appear to be in pain. About nine he fell asleep, and slept quietly about two hours; when he awoke he complained only of fatigue; the agitation returned several times during the day, but lasted only a few moments. The face became animated when this occurred, and there was general but momentary heat, which was soon followed by pallor and depression. At night he asked for something to eat, and he had some milk the same as his sister. Soon after he had a stool, and at nine he again fell asleep, passed a good night, and the next day, forty-eight hours after he had taken the belladonna, he was quite well. He recollected a part of the hallucinations, so much so, that three days after taking the poison he was looking for a purse of gold he thought he had seen under a box.

He confessed to me that he had eaten two of the boluses, which he had found very good, and he should have eaten the rest if he had not seen his mother coming.

ABSTRACT OF THE EVIDENCE TAKEN
BEFORE THE PARLIAMENTARY
COMMITTEE IN 1834.

Evidence of MR. WILLIAM CLIFT.

(Continued from page 659.)

THE concluding portion of the abstract of Mr. Clift's evidence given in our last number, left Sir Everard Home applying the manuscripts of Mr. Hunter to his own *especial* use; cutting them up into lectures, the composition of which was for a brief period deemed to be his own, and drawing up papers for the Philosophical Transactions, the credit of concocting which he arrogated to himself.

We now proceed with the evidence, which goes to show that between the time of the manuscripts being removed in 1800 to the period of 1823, when Mr. Clift expressed a desire to obtain them, for the purpose of arranging and describing the Museum, Sir Everard Home was so intent on writing papers (query,—copying?) for the Philosophical Transactions, that very little else in the way of collection was thought of by him, "because" he always made his engagements in this way an *excuse* to the Trustees for not having proceeded with the catalogue, affirming that he was employed in making out the subjects which were but imperfectly understood.

To a question from the chair, inquiring on what occasion and in what terms Mr. Clift conveyed to the Board of Curators the information he possessed respecting the existence and removal of these manuscripts, it was rejoined, that he believed all the members of the board had a *very imperfect* knowledge of the nature of those papers; yet they knew that Sir Everard had in his possession *all* Mr. Hunter's manuscripts. This knowledge they obtained from Sir Everard himself while he was a member of their Board, besides which, almost all of the Curators had been acquainted with Mr. Hunter and must have known of the existence of a large mass of manuscripts. Mr. Clift proceeds, "After the destruction of the papers, Mr. Cline stated to me, on Mr. Hunter's own authority, that Mr. Hunter had written a Treatise on the Diseases of the Bones, which he intended for publication. Drawings intended to illustrate this treatise, and made by an artist who lived in Mr. Hunter's house, named Mr. W. Bell, are *preserved in the Museum.*" To several succeeding questions, the answers given by Mr. Clift went to explain that the members of the Board of Curators had but a *very imperfect* knowledge of the *extent* of the manuscripts given into the custody of Sir Everard Home, but that still they *knew* that *some papers* of Mr. Hunter's did exist in his possession.

We now come to that part of Mr. Clift's examination which relates to the unwarrant-

and reckless destruction of Mr. Hunter's manuscripts by Sir Everard Home. The perpetration of such a deed by the custodian of such valuable relics of one of the master spirits of our science, calls for the severest censure, if not the execration of the community whom that incendiary act deprived of so great a treasure.

To the first question on this nefarious transaction, then, "When was it that you first received any information as to the destruction of those manuscripts?" Mr. Clift rejoined, "I think in July, 1823, and before the Curators made application to Sir Everard Home for their restoration." Sir Everard himself, it appears, was the impartor of this disastrous fact to Mr. Clift, and, in stating the mode of its being divulged, Mr. Clift said, "Sir Everard Home began by telling me that an accident had very nearly occurred at his house; that it had been nearly on fire; that the engines came, and the firemen insisted upon taking possession of his house: they saw the flames coming out of the chimney; he did not wish to admit them, but they insisted upon being admitted. I asked him how it happened; and then he told me," (we wonder whether he blushed, or assumed the *more* natural colour of guilt, the cadaverous hue) "THAT IT WAS IN BURNING THOSE MANUSCRIPTS OF MR. HUNTER'S." This *delectable* confession took place while both the gentlemen were on their road to Kew, to a monthly meeting of a medico-botanical club. The Chairman of the Committee proceeded,—"What were your feelings at the time of receiving that information?" Mr. Clift,—"I can hardly describe them. I said to him, 'I hope, Sir Everard, you have not destroyed those TEN volumes relating to the gallery.' He said 'Yes.' (!) 'And Mr. Hunter's lectures?'—'Yes.' (!!) And then I mentioned perhaps TWENTY others that I had a very perfect recollection of." Mr. Clift was requested here to go on describing the state of his feelings at being acquainted with this *honest* piece of guardianship, and proceeded, "I can hardly describe them, because I felt that *all those hopes that I had entertained were entirely frustrated and destroyed.* I considered that my life had been spent in the service of that collection, and I hoped to have lived to see those papers *beneficially* employed. When I had made inquiry respecting the principal of them, and he told me they were all gone, I said to him, 'Well, Sir Everard, there is only ONE THING MORE TO BE DONE.' He said, 'What is that?' I said, 'TO BURN THE COLLECTION.'"

Mr. Clift was after this point of the examination requested to state, according to the best of his recollection, what the papers were that were destroyed, but answered "I cannot pretend to give an account of half of them from recollection. At the time I had, and now have, memoranda of, I believe, all the manuscripts that I did recollect at the time,

giving the titles of all the papers destroyed, that I knew once existed." On referring to these memoranda it appeared that among the papers destroyed were nine folio volumes of dissections of animals, viz. vol. i., Ruminants; vol. ii., Animals sine Cæco; vol. iii., Monkey and its gradations; vol. iv., Lion and its gradations; vol. v., Scalpris Dentata; vol. vi., Anatomy of Birds; vol. vii., Of the Tricoilia; vol. viii., Anatomy of Fishes; vol. ix., Anatomy of Insects. There was one volume on the Natural History of Vegetables. There were also a great number of fasciculi, among which were the following—Introduction to a comparison between Man and the Monkey; On Muscular Motion, being subjects of Croonian lectures; Effects of extracting one Ovarium upon the number of Young produced; Experiments on Ewes, with a view to determine Impregnation and Uterine Gestation; On Monsters; On the Skeleton; Dissection of the Tapir; Dissection of the Armadillo with nine bands; Animals from New Holland; Piked Whale; Bottle-nosed Whale; Fin-backed Whale and Porpoise; Worms in animals of the Whale tribe; Bell-barnacle; On the Eel; Anatomy of the Holothuria; Anatomy of the Syren of North America; Account of a Unicorn Fish from Hispaniola; the Earth Worm; Progress and Peculiarities of the Chick; Description of Rymsdyk's drawings of the Incubation of the Egg; General Observations on Insects; the Bee tribe, Humble Bee, Wasp, Hornet, and on Beetles; Anatomy of the Silk Worm; Anatomy of the Moth; Red-piped Coral; On Fossil Bones, two parts; Observations on Surgery; Observations on Scrofula and Cancer; Lectures on the Principles of Surgery; Cases with post-mortem examinations; Cases, where no post-mortem examinations were obtained; Two Solanders of Cases written out fairly and separately.

Mr. Clift farther stated that two volumes only in folio, about a TENTH part of the papers relating to the preparations in the collection, were obtained by the Curators on application to Sir Everard Home. After the memorable confession of the latter very little conversation took place for a long time between him and Mr. Clift; Mr. Clift considering that an irreparable injury had been inflicted on the collection by its *worthy* guardian. One question, relating to the *motives* of Sir Everard Home for making a bonfire of Mr. Hunter's manuscripts, and its answer are deserving of remark. Q. "In the course of your conversation did you ask Sir Everard what led him to take this step?" (i. e. making the bonfire). A. "I knew that that week Sir Everard had received back from the printer the LAST PROOF of his (?) second volume of his Lectures on Comparative Anatomy, and that he had used those papers very largely in the composition of that work,"—a work, however, which, in the opinion of Mr. Clift, in no way supplies the loss, as regards the descrip-

tion of preparations in the Museum, it being a mere general description, seldom referring to particular specimens.

In answer to other questions put by the *Chairman*, Mr. Clift said that he became Mr. Hunter's apprentice in February 1792, and remained with him till his death on the 16th of October, 1793; had transcribed a great deal for Mr. Hunter during that period; and had the care of the collection. The Hunterian Manuscripts were kept in cases in a study, and Mr. Clift never heard Mr. Hunter express a wish that they should be destroyed; nor, subsequently to his death up to the time of the removal of the papers in 1799, did he ever hear Sir Everard Home, or Dr. Baillie his co-executor, give any hint whatever that Mr. Hunter had given directions for the destruction of his manuscripts. No industry on the part of the Examiner and his fellow-labourers in the Museum can ever, in his opinion, repair the loss sustained by the burning of these papers. Many of the preparations are unknown, and their explanation can only be discovered by degrees, it being frequently necessary to re-examine the organs of animals to throw light upon the specimens, and to prove what they really are; many of them have been re-discovered as it were by these means. The proportion that now remain unexplained perhaps may be, of all kinds, wet and dry, about a thousand. The loss is greater in the department of Comparative Anatomy than in that of Pathological Preparations.

(To be continued.)

MAGDALEN CHARITY.

LEPER HOSPITAL.

WE have been favoured with a general account of the proceedings relative to a pending trial between the Rev. W. Carwithen, plaintiff, and the Mayor, Bailiffs, and Commonalty of Exeter, defendants. It is instituted for the purpose of showing that the disease LEPROSY does not exist in this country; therefore it is proposed that the bequests of the benevolent individuals who endowed this Charity should be appropriated to other and more useful purposes. We have of course no intention of appearing as advocates of one or the other party; the legal subtleties may be settled by the lawyers; and with respect to the medical evidence our comments shall be few. We cannot, however, avoid noticing how remarkable is the discrepancy of medical evidence in courts of justice. When we hear two men of equal eminence (as we frequently do) delivering sentiments on scientific subjects as distant as the poles are asunder, it impels us to the inevitable conclusion, that physic is an uncertain science, that its votaries should repress their enthusiasm, and confidently confess to each other that what we believe to be true

may be erroneous—all is conjecture in physic. We give a summary of the evidence of the following gentlemen, *pro.* and *con.*

“Dr. Shafter.—That it was in all respects the same disease as the common leprosy of this country, as exhibited in the cases of the patients actually inmates of the Hospital Saint Mary Magdalen.

“Sir H. Halford, Dr. Copland, Dr. Ramadge, Mr. Lawrence.—That it was a different disease from the common leprosy of this country.

“Sir B. Brodie, Dr. Southey, Dr. Blackall.—That it was the same disease as that which is now known under the name of Elephantiasis.

“These two last opinions are likewise entertained by the gentlemen whose signatures are appended to this document, and in support of which the following considerations are submitted.

“The object of this inquiry is to show, first, that the leprosy of the middle ages was not the same as the common leprosy of this country; and, secondly, that it was no other than the disease now known under the name of elephantiasis.

“One fact has already been established, which is of much importance in this inquiry, namely, the contagious nature of the disease.

“It is evident, from the references which have been made to the original documents of the Hospitals of St. Mary Magdalen in Exeter, of St. Julian in St. Albans, and of Newton Bushell in the county of Devon, that such was the generally received opinion of that time; and although very erroneous ideas often prevail on the subject of contagion, yet it cannot be imagined that such extraordinary precautions should be adopted in secluding lepers and subjecting them to severe police regulations, unless the necessity of those measures was authorised not only by popular belief but by the highest medical testimonies. No disease, therefore, can be admitted to be the leprosy of the middle ages unless it can be proved by the evidence of contemporary medical writers that it was at least reputed to be contagious.

“If we examine the testimony of both ancient and modern authors respecting the common leprosy, we shall find little reason for concluding it to be that formidable disease for which the lazar houses were erected. By the Greek writers the term *lepra* (λεπρα vel λεπρα) is uniformly applied to a scaly eruption of the skin, resembling, from all accounts, the common leprosy of the present day. A very few extracts will show this acceptation to be the true one. Hippocrates speaks of it as a blemish or defect rather than a disease. Celsus, who describes it under the name of *vitiligo*, expresses himself to the same effect. His words are ‘Although vitiligo has no danger attending it, it is a disgusting complaint, and comes of a bad habit of body.’

“Lepra is not once mentioned by Aretæus, who has given so copious a description of elephantiasis. Galen himself, who has treated so diffusely on all the diseases known in hi

day, slightly alludes to leprosy; and it is not till we arrive at the later Greek writers that we meet with what may be truly called an accurate description of this disease. That given by Paulus Ægineta is perfectly exact. *Lepra* (he observes) penetrates deeper into the skin in round patches, from which scales like those of fish are detached. Ætius gives a corresponding account. If we pass from Ætius, who lived in the sixth, and Paulus in the seventh century, to Avicenna, who wrote in the tenth, we shall find the first traces of that confusion which afterwards prevailed in the nomenclature of these diseases.

“The Arabic word which answered to the lepra of the Greeks, and the vitiligo of Celsus, is rendered by the Latin translators of the Arabian writers by the terms *scabies* and *impetigo*, or the still more barbarous one of *morphia*, while that of lepra is given for the first time by medical writers to elephantiasis, which was called the *Lepra Arabum*, to distinguish it from the Greek leprosy. The confusion that has prevailed on the subject is one of names only, for the diseases themselves are as carefully distinguished from each other by the Arabian as by the Greek writers.

“It appears from this rapid but faithful survey of their opinions, that the common scaly leprosy existed in those times with the same characteristics as it presents at the present day, and that it was never considered either as a fatal or contagious disease. From the passages quoted from Hippocrates and Celsus, from the slight mention of it by Galen, and the terms in which it is described by other writers, it is certain that it was unattended with danger; and that it was not contagious may be inferred from the absolute silence observed by them in that important particular. For had it really been that formidable disease which broke out with the violence of an epidemic during the middle ages, and for which houses of refuge were everywhere provided, surely some mention would be found in the medical records of that period of so remarkable a fact. If we extend our inquiry to the authors who followed and imitated the Arabian school, and which are found scattered at long intervals in the long and dark period that intervened between the first Crusade and the revival of letters, we shall find a corresponding evidence on the subject of this disease of common leprosy; they speak in the same general terms as the preceding writers; while on the contrary they afford the most minute and copious details of the symptoms and varieties of elephantiasis, which they describe under the name lepra. Engrossed by the consideration of that formidable malady, they seem to have little attention to bestow on one of such comparative insignificance.

“The inquiry concerning this part of our subject may now be brought to a close. The result may be summed up in a few words, viz. that the common leprosy of this country, according to the testimony of the most approved

medical authorities, both ancient and modern, has never been considered as a dangerous or contagious disease, and consequently that it is not the leprosy on account of which this and similar hospitals were established.

"We have now to adduce proofs that the leprosy of the middle ages was the same as that now known under the name of elephantiasis.

"By a reference to the authors already quoted, it may be shown, not only that elephantiasis was considered as a fatal and contagious disorder, but that the practice of secluding persons affected with it has existed from the earliest times.

"The eloquent description of elephantiasis by Aretæus is well known. It is a striking and animated picture of that disease, and has been considered both a model and authority by succeeding writers.

"It will be sufficient for our purpose to borrow from it some of the most striking symptoms, only in order to establish the identity of the disease with that described by other writers.

"The essential character of elephantiasis is its tubercular nature. At an advanced period of the disease, tubercles are formed not only on the face and external surface of the body, but likewise in the mouth, palate, and mucous lining of the intestines.

"These tubercles, according to their situation and different states of hardness, tumefaction, and suppuration, give rise to most of the symptoms described by authors, the most remarkable of which have been distinguished by particular names.

"1st. Leontiasis, or that peculiar expression given to the eyes and face by tubercles, which have been compared to that of a lion.

"2nd. Satyriasis, or satyr-like expression from same cause.

"3rd. The fœtor of the breath.

"4th. The change in the sound of the voice.

"5th. The ulcers or sores on the external parts of the body are all symptoms produced by the suppuration of the tubercles in different parts and in different degrees. But there is one attribute of the disease, namely its contagious nature, which is admitted by all writers, on account of which the practice was introduced of separating elephantiac patients, or lepers, from society.

"'It is equally dreadful,' observes Aretæus, 'either to live or to take food with the patients, as is the case with the plague, because the infection is very easily communicated by the breathing.' In another place occurs the following remarkable allusion to the custom of separating the sick. 'While, therefore, they are in such a dreadful state, who would not fly or turn his back upon his son, father, or brother, labouring under the most cruel misfortune, especially as there is a danger of the disease being communicated? Hence many have exposed their nearest and dearest relations in deserts and mountains; some supplying

their wants for a time, others withholding the necessaries of life, and wishing them to die as soon as possible.'

"A similar fact is mentioned by Galen as having been witnessed by himself when a young man in Asia Minor. In speaking of the use of viper's flesh as a remedy in elephantiasis, he relates the case of a patient suffering under that complaint, who, because of his having communicated the same to one of his associates, was sent to live apart in a small hut purposely built for him on a hill at some distance from the town to which he belonged. Paulus Ægineta gives a similar testimony:—'Seeing that this disease is of the number of those which are easily propagated by infection, no less than is the plague itself, the dwellings of those labouring under it ought to be removed to as great a distance as possible from cities, and placed in inland and cool situations, and frequented by as few persons as possible. There they may have the liberty of the neighbourhood, and the enjoyment of a more suitable atmosphere, and at the same time avoid communicating the disease to others who may chance to come in their way.' An allusion to the same custom is made by Coelius Aurelianus. 'Some,' says that author, 'recommended the patient to be shut up if he be a stranger, and hath made his appearance in a city not as yet visited by the disease, but, if a citizen, to exile him to a greater distance, and place him apart from men in some inland and cool situation. If he recover, then to recal him, by which precaution the citizens might not be affected with the contagion of this disease. But they who give this recommendation, propose that the patient is to be abandoned to his fate rather than that means be taken to restore him, a degree of inhumanity which is repugnant to the character of the medical profession.'

"Avicenna, according to his Latin translator, gives a description of elephantiasis under the name of lepra, which corresponds perfectly with that of Aretæus, and in which he expressly states that the disease is contagious.

"Such being the opinions of the early Greek and of Arabian writers on the contagious nature of elephantiasis, and the necessity of separating the sick, it was but natural that a similar belief and practice should be adopted in those countries where that disease had become prevalent in consequence of communications with the East. The coincidence of these circumstances affords a strong presumption in favour of the identity of the disease, though occurring in different times and places, and under different names. But the fact may be established beyond a doubt by referring to those authors who have given a history of the leprosy of the middle ages, and whose testimony is particularly valuable, inasmuch as they were eye-witnesses and observers of the disease which they described.

"The author who is best known, and who is most commonly referred to as the best autho-

urity on this disease in the age in which he lived, is Gilbertus Anglicus, an Englishman, who is placed by Haller before the thirteenth century.

"The testimony of this author is of peculiar weight in this question, not only from the circumstance of the time and country in which he lived, but, likewise, because his description of the disease is referred to as an authority by the three physicians of King Edward the Fourth, in an affidavit which they were required to make by the Lord Chancellor on the subject of leprosy.

"This curious document is to be seen in Rymer's *Fœdera*, and bears the date of 1468. By comparing the signs of leprosy set forth in this certificate with Gilbert's description, we shall be able to ascertain how far they both refer to one and the same disease.

"The description of leprosy by Gilbertus comprises all the symptoms that have been above enumerated from Aretæus, and which result from the tubercular nature of the disease.

"Moreover he divides the disease into four species, or rather varieties, called *lepra elephantia*, *lepra leonina*, *lepra Tyria*, and *lepra alopecia*. These terms refer to forms of diseases unknown in the present day in this country, on which, therefore, it is not necessary to enlarge. But that it may not be suspected that the common scaly leprosy was comprehended under one or other of these denominations, it will be sufficient to refer to Sauvage (*Nosol. Method. tom. ii., p. 567, 4to, Amstel, 1768*), who has given an excellent summary of them from Gilbertus, to the description and observations of Petrus Forestus (*Observat. Chirurg. lib. iv., obs. 7*), to the account of Gabriel Fallopius (*op. tom. ii., p. 278*), to Ambrose Paré (*lib. xx. c. 6*). These authors not only regard the species of Gilbertus as being peculiar to elephantiasis, but they carefully distinguish them from the scaly leprosy, which they describe as a separate disease. The principal reason for alluding to them in this statement is to identify the leprosy of Gilbertus with the leprosy alluded to in the above-mentioned case recorded in Rymer's *Fœdera*, the same specific distinctions being adopted in both cases.

"The case reported in Rymer is shortly as follows:—A female of the name of Johanna Nightingale, of Brentwood, in the county of Essex, had been suspected of being infected '*foeda lepra contagione*,' and to be, in fact, a leprous person. Now it seems that such was the dread that prevailed respecting the contagious nature of that disease, that a writ was in force, by which a leper might be legally compelled to seclude himself from society upon the information of one or two persons. These means had been resorted to against Johanna Nightingale, upon which she appeals to the Lord Chancellor. In consequence of this appeal, the Lord Chancellor orders the king's physicians, William Hattecliff, Roger

Marshall, and Dominic Sarego, Masters of Art and Doctors of Medicine, to examine and certify whether the said individual be a true leper or not. The certificate of the physicians, drawn up in compliance with this order, is a most interesting document, as it shows the opinion entertained on the disease of leprosy by the highest medical authority of that time. That opinion is conformable to those advanced by Gilbertus and preceding writers as to the nature of the disease and its contagious character. This will be proved by the following extract from the said certificate:—'We are taught by the science of medicine, that the disease of leprosy in general may be known by many signs, and also that each species of that disease, which are four, namely, *alopecia*, *Tyria*, *leonina*, and *elephantia*, may be known and discerned, and each species be specifically distinguished from the others.' After having examined the suspected leper by twenty-five general and forty specific signs of leprosy they pronounced her free from any and all symptoms of the disease, 'and in nowise infected with any species of infectious leprosy.'

"A further indication is furnished in the passage of Fitzherbert, where the writ is given, of the particular symptoms of that kind of leprosy to which this enactment might be specially directed:—'But there are divers manners of lepers, but it seemeth that the writ is for those lepers who appear to the sight of all men that they are lepers by the *voice*, and their *sores*, and the *putrefaction* of their flesh, and the *smell* of them, but for those who are infected in their bodies, and it does not appear outwardly upon their bodies. Query, whether such writ lieth to remove them.'—Fitzherbert, *in loco*.

"The symptoms here enumerated are strongly characteristic of elephantiasis, but have never been attributed to the scaly leprosy in its most aggravated form.

"It is worthy of remark in this certificate, that a systematic classification of the symptoms of leprosy was adopted with the intention of ascertaining its existence in the case in question. There are strong reasons for believing that a regular plan of examination was pursued by medical practitioners in their examinations of patients suspected of leprosy. Cases of a doubtful and suspicious nature must frequently have occurred, in which great caution would be required, and as the disease itself declined the attempts at fraud by needy impostors would become more numerous, and demand more vigilance on the part of those whose duty it might be to detect them. That physicians were appointed for that purpose, appears evident from the numerous allusions made to that practice as being already established in many countries. Thus we read, in Forestus of Alcmæer, a quotation from Hollerius, a French physician of the sixteenth century, to the following effect:—'But because this disease is exceedingly contagious

and disgusting, and moreover somewhat hard to be distinguished, it hath been well directed by our forefathers, that persons attacked with elephantiasis should be packed without the city walls, and that learned physicians be appointed as judges and examiners to search into the matter, as is done in Belgium and Arlate.' It would seem that, in some instances, these examiners were culpably remiss in performing their duty, as we learn from the same author. Alluding to the number of lepers in Holland, he observes,—'But, to speak the truth, not all those who, under the name of lepers, are seen wandering about this and the neighbouring districts are to be accounted true lepers, but, solely on account of their squalid and filthy appearance and disgusting eruptions, they are avoided by the healthy and those inclined to be timorous, and regarded as really leprous; nay, there is scarcely one in ten of these pretended lepers who is attacked with true elephantiasis. Now let us confirm this assertion with both fact and reasoning. At the time when Henry Verger, a distinguished physician of pious memory, settled at the Hague, and myself had some communication together on this very subject, after having carefully weighed and considered the matter, we saw, to our grief and indignation, that, owing to the carelessness or rather want of skill of the physician at Haarlem, on whom devolved the charge of examining the lepers of the whole country, that many are put down as lepers who, in truth, are affected with confirmed itch, or any other blotch on the skin, as the vitiligo, lence alphas, or morphia impetigo, lichen psora, which is the same as the Greek leprosy.'

'It may be observed that the most distinguished writers at the period of the revival of letters, clearly saw and pointed out the error that had been committed in giving the term of leprosy to elephantiasis. It will be sufficient to refer to the works of Gabriel Fallopius, of Ambrose Paré, of Foresters, of Sauvages, and Van Swieten, in order to ascertain the opinions of those illustrious men on that subject.

'From the observations and proofs that have been brought forward in this inquiry, we may be permitted to conclude, 'that there is every reason to believe that the disease that prevailed so generally during the middle ages, and for which this and similar hospitals were established, was that which is now known under the name of elephantiasis.

" Answer to the Second Query.

'Elephantiasis cannot be said to exist in England, except in those instances where it may happen to have been imported into the country. The cases described some years ago by Mr. Lawrence and Dr. Southey are of that description. The former was described by Mr. Lawrence in the *Medico-Chirurgical Transactions*, and was seen by one of the undersigned gentlemen, then a pupil in St.

Bartholomew's Hospital.' The patient alluded to was a native of North America, and had removed to the Bahama Islands, where in all probability the foundation of the disease was laid. He afterwards died in the Devon and Exeter Hospital in 1815. It is singular that the only case of that disease for which the St. Mary Magdalen's Hospital was founded, that in all probability has for centuries entered within the walls of the city, should have been received in a different establishment.

" Answer to Third Query.

The leprosy of the middle ages cannot properly be said to exist in England. The diseases now known under the name of leprosy in this country are not modifications of that disease but essentially different from it.

" Answer to Fourth Query.

'There is at present no inmate of the hospital who is affected with the leprosy, for which, it is presumed, it was intended. Of nine cases, there are four labouring under the common scaly leprosy in its usually mild form; three cases are cutaneous eruptions of another character; one a case of lupus, and one a case of paralysis.

(Signed)

- " EDWARD MACGOWAN, M. B., Exeter,
 " ROBERT HAYWARD LUCAS, M.D., Exeter,
 " THOMAS FOSTER BARHAM, M.B., Exeter,
 " EDWARD PARKER PRIDHAM, Surgeon,
 Exeter,
 " DREWRY OTTLEY, Surgeon, Exeter,
 " J. B. PARKER, M.R.C.S., Exeter,
 " JAMES BENNETT, Surgeon, Exeter.

" In Chancery. Between the ATTORNEY-GENERAL, on the relation of William Cartwilen, Plaintiff; the MAYOR, BAILIFFS, and COMMONALTY of the City of Exeter, Defendants.

" In re Hospital of St. Mary Magdalen.

'First—For persons afflicted with what particular form or description of leprosy may the Hospital of St. Mary Magdalen be presumed to have been intended as a receptacle, with the grounds for the presumption?

'Assuming that the Hospital of St. Mary Magdalen was instituted for the reception and support or cure of lepers, or persons affected with leprosy, the foregoing question is an inquiry into the sense affixed to those terms at the time when the hospital was established, and for an indefinite period subsequently. I consider these terms have been employed during the middle ages in a popular and not a scientific sense, and that the name of leprosy was given, not to any specific disease, but to several affections of the skin, which, in the progress of medical science, have become distinguished from each other. I therefore believe that, at the time in question, there were included, under the common name of leprosy, not only the scaly affection of the skin, now

called *lepra* (*leprosy of the Greeks*), and the tubercular disease, called *elephantiasis*, or *leprosy of the Arabians*, but also other severe, intractable, and chronic cutaneous ailments. These disorders were probably more frequent and serious in those ages, from the habit of using woollen clothes, the neglect of personal cleanliness, the want of domestic care, arising from the exaggerated fears of contagion, unwholesome food, and the entire absence of suitable medical treatment. My grounds for this opinion are, that contemporary writers furnish no clear account of any one definite disease under the name of *leprosy*; that the statements collected from various contemporary writers are only reconcilable on the supposition of various diseases having been included under a common name; and that the several forms of cutaneous disorder have been confounded together under vague and indefinite names, even until a very recent period, their accurate discrimination having required closer observation and an advanced state of medical science.

"I do not believe that the tubercular affection of the skin, called elephantiasis, or leprosy of the Arabians, was the disease for which the Hospital of St. Mary Magdalen, or any similar establishments, were instituted in England, nor that it has ever prevailed extensively in this kingdom. The elephantiasis, or Arabian leprosy, is a disease of warm countries, and has never been known, so far as my experience and reading go, to have originated in any one instance in England or in any other country of similar climate and temperature. I have had under my care a few cases of this malady, in all of which the complaint has either been brought by the patients from the East or West Indies, or has appeared soon after their arrival in England in natives of those countries or others who had long resided in them. Even in this imported form the disorder is of great variety in England.

"Second.—Does the disease for which the hospital may be presumed to have been established now exist in England?

"If the foregoing view of the subject be correct, this second question must be considered in the affirmative.

"Third.—Does the disease which in the middle ages existed under the name of leprosy, and which either was, or was supposed to be, a contagious disease, now exist in England; or are the diseases which now occur under the name of leprosy either that disease or mere modifications of that disease; or are they diseases in their character essentially different?

"I believe that the diseases of the skin now occurring in England, although no longer included under the general name of leprosy, are the same in their essential nature as those for which the Hospital of St. Mary Magdalen was instituted.

"When compared with the notices of the leprosy occurring in the writers of the middle ages, the diseases which we now see are

milder in their character and far less frequent. Hence it is totally unnecessary to institute special hospitals for their reception; and I apprehend that it would not be easy to find a sufficient number of suitable inmates, especially if they were to be furnished by a single district or county. Of the persons labouring under these diseases, the majority neither require, nor would be benefited by, confinement in an hospital, while the more serious cases are freely received into the general hospitals, where they meet with every necessary care and treatment.

"The supposed contagious nature of leprosy, and the consequent notion that its dissemination might be prevented by the separation and seclusion of the infected, were probably the principal inducements to the establishment of leper-houses. I believe this opinion to have been entirely unfounded; at least, it has been long clearly ascertained that, of the diseases now called leprosy, viz.—the scaly lepra of the Greeks, and the tubercular elephantiasis, or leprosy of the Arabians, neither possesses the slightest contagious property, under any variety of form, or any circumstances of climate or situation. The same observation is applicable to the other chronic diseases of the skin, which may have been included together with the two preceding, during the middle ages, under the common name of leprosy.

"Fourth.—Are the cases of the present inmates of the hospital, according to the symptoms as detailed by Dr. Blackall and the other gentlemen, or any, and which of them, cases of leprosy; and, if so, of what kind or description of leprosy; and whether or not particularly of that kind or description of leprosy which you consider to have been contemplated by the founder of the hospital in question?

"The cases of Elizabeth Phillips, Jane Weir, and Caroline Hadley, present examples of leprosy (*lepra* of medical writers), in the mild form in which the disease now appears in this country. I cannot doubt that such cases would have been considered heretofore as proper objects for admission in the hospital of St. Mary Magdalen.

"The disease of Sarah Saunders is a cutaneous complaint allied to leprosy, but now distinguished from it under the name of psoriasis. It seems probable that Sarah Jortin and Henry Downing have suffered from the same disorder.

"I believe that these three patients would have been considered as falling within the benevolent purposes contemplated by the founder of the hospital.

"Sally Southard and Ann Punched are afflicted with an obstinate and destructive disorder technically called lupus, and popularly denominated cancer. It is a matter of mere conjecture whether such patients would have been deemed originally entitled to admission into the hospital of St. Mary Magdalen or not. I incline to the affirmative, seeing that

no nicety of discrimination between the various forms of cutaneous disease was practised in those times.

"Elizabeth Squires and Sarah Guy, not having any disease of the skin, have no claim to be admitted into a leper hospital.

WM. LAWRENCE.

"Whitehall Place,
"22nd January 1835."

SPEAKING MACHINES.

WE intend to occupy a couple of pages in our two or three following numbers with a brief account of the attempts that have been made to imitate the mechanism of the larynx and the sounds of the human voice; in other words, with a short history of speaking machines.

The subject, we believe, is new to many; and this circumstance, added to its important physiological bearings, the wide field it presents for further research, and the encouragement which the progress already made holds out to future experimentalists, has determined us to lay this condensed report before our readers.

We may as well, indeed, take this opportunity of stating, that it is our intention from time to time to give similar abstracts of the progress of modern science, convinced that by such a plan we shall essentially benefit the medical student, as well as that numerous class of our readers, whose attention is so wholly engrossed by professional duties as to leave them little opportunity of following up for themselves the discoveries and improvements of our own times.

In accordance with this design, we shall always be happy to take into consideration the requests or suggestions of correspondents, with regard to the particular branches of science on which such reports as the present appear to them to be especially required.

Speaking machines, *properly* so called, are instruments which by purely mechanical means emit sounds like those of the human voice. The speaking statues and heads of Egypt, Greece, and Rome, which delivered in old times dubious responses to those who consulted the oracles of the gods, were merely contrivances by which the voice of a priest was clandestinely conveyed to the statue's lips; and the speaking images of the middle ages, which excited the alarm of the superstitious and the admiration even of the learned, were in general constructed on the same principle, more or less skilfully disguised and concealed. None of these, therefore, come strictly under the designation of speaking machines. But inasmuch as truth has ever had its beginnings in error, and science emerged from superstition, as the sun breaks forth from the eastern clouds, it will be interesting, and not wholly uninteresting, to take a brief view of these early deceptions.

The famous Temple of Jupiter, near Dodona, in Thessaly, maintained the most ancient of the oracles of Greece. Around the hill Tmarus, on which the temple stood, there was a grove of sacred oaks, from which mysterious voices came forth, revealing the future to votaries who had laid their offerings on the shrine of Jove. This was effected by the artful concealment of priests within the hollow trunks or amidst the foliage of the trees; though many ancient authors would have us believe that a beam from this grove, placed in the prow of the ship *Argo*, gave oracular information to Jason and his Argonauts.

The celebrated Colossus, erected by the Egyptians, in honour of Memnon, their king, emitted a melodious note when the first light of morning fell upon its lips, and uttered a melancholy sound when the last sunbeams faded in the west; and many of the inscriptions, which the credulous visitors used to engrave upon the statue, prove that its apparent vocal powers were far more extensive than this; the sudden breaking of a harp-string, the clang of sounding brass*, a wild strain, like that of the Eolian harp, and even verbal salutations, have been successively ascribed to the statue by different authors.

Mr. Wilkinson has lately found a sonorous stone in the lap of the statue, with a recess cut in the block behind, wherein a person may lie concealed from the most scrupulous observer in the plain below. He posted some peasants at the foot, and ascended himself into the lap of the statue. Having struck the stone with a small hammer, he inquired what they heard; they answered, "Ente betidrob enatras" (you are striking brass). Their expression coincides remarkably with the inscription mentioned in the note, and Mr. Wilkinson concludes this to have been the sound which deceived the Romans, and led Strabo to observe that it appeared to him as the effect of a slight blow.

The difficulty of reconciling these contending statements is easily removed by supposing that the priests varied the performances of the statue, to keep alive that curiosity by which they had their wealth; and artfully proportioned the miracles of the day to the credulity and wealth of the votaries present.

With regard to the articulation of words, with which we are now principally concerned, it was in all probability effected by an arrangement of conducting tubes, similar to those which will presently be described.

The head of Orpheus, in the island of Lesbos, which predicted the death of Cyrus, and told the Greeks that Troy could not be taken without the arrows of Hercules; the statue of Æsculapius, constructed by the

* One of the inscriptions says, "Like brass when struck," "ὡς χαλκὸν πτυσσόμενος."—See *Wilkinson's Travels in Egypt*. London, 1835.

impostor Alexander; the hollow statues at Alexandria, broken to pieces in the fourth century by Bishop Theophilus, and the speaking instruments made in the fifth century by Cassiodorus, were all furnished with tubes by which a voice might be privately conveyed to the inquirer's ear. Alexander is said by Lucian to have used the gullets of cranes (*γαζαρον αρτηνας*) through which to carry speech to the lips of his statue.

The Teraphim of the ancient Jews were household idols, introduced among them from Mesopotamia, and holding much the same rank and estimation with the Penates of Troy and Rome. That they were sometimes consulted as oracles, is proved by the history of the man Micah and the Danites, and that the answers seemed to issue from their lips is inferred from Zechariah's expression—"The idols have spoken vanity." There is every reason to believe that the same simple contrivance was employed in these images, as aided the deceptions of succeeding impostors. Such artifices, however, were not likely to escape detection during any long period of time, and it is only surprising that so many of these hazardous attempts were ventured, seeing that the risk was wholly gratuitous, the common method of employing priests, or women, instructed for the purpose, being at once more simple and more safe.

This short account of the oracular statues of antiquity will be well concluded by the following extract from Clarke's Travels:—"At Argos we found one of the most curious tell-tale remains yet discovered among the vestiges of pagan priest-craft; nothing less than one of the oracular shrines of Argos, alluded to by Pausanias, laid open in the ruins of a temple. The altar remains; a secret subterranean passage terminates behind the altar, its entrance at a considerable distance, cunningly contrived and easily concealed. We amused ourselves with mimicking the solemn farce. Surely it will never again become a question, whether the answers were given by evil spirits or by the imposture of the priests."

Oracles, in the opinion of Eusebius, were struck dumb at the coming of Christ; but Pausanias testifies to their existence two centuries afterwards. Plutarch alleges two curious reasons for their disappearance; first, the chragin of Apollo, who took it in dudgeon to be so continually troubled with frivolous interrogation; and, secondly, a mortality among the genii or demons who had the immediate management of the oracles. Cicero, however, more sagaciously attributes their decline to the diminished credulity of the people, who began, he says, to suspect them for cheats.

The principle of the conveyance of sound to great distances through pipes, is very simple. Sonorous undulations in the open air travel in every direction, and their sound may be heard all around within a certain distance; but when they are excited in a tube, the whole impulse is concentrated in one direction, and

acts upon one column of air; the sound becomes proportionally louder, and travels proportionally farther.

The curious speculations that were entertained while the scholastic philosophy still shackled men's intellects, are well illustrated by the following proposition of Walchius for conveying the sounds of the voice within tubes.

It is possible (he says) so to contrive a trunk or hollow pipe, that it shall preserve the voice entirely, for certain hours or days, so that a man may send his words to a friend instead of his writing. There being always a certain space of intermission for the passage of the voice, betwixt its going into those cavities, and its coming out, if both ends are seasonably stopped whilst the sound is in the midst, it will continue there till it has some vent. When the friend to whom it is sent shall open it, the words shall come out distinctly, and in the same order wherein they were spoken. This conceit calls to his mind a unique specimen preserved, up to his time, among the Popish relics—"Joseph's 'hah!'" or the sound which he made (as other carpenters use) in fetching of a blow, laid up within a glass, among the ancient relics."

We now come to notice the pretended speaking machines of ages less remote from our own. Though no longer employed in defrauding the superstitious, the construction of these later instruments displayed far greater ingenuity and science than the ancient impostors had evinced; and whereas the former were ascribed to the miraculous agency of superhuman intelligence, these latter were exhibited as the production of men distinguished from the rest of their species only by superior knowledge and skill.

Gerbert, who under the name of Sylvester II., filled the papal chair from 999 to 1003, constructed a speaking head of brass. The nature of the mechanism, and the powers of the instrument are unknown; it was, however, sufficiently ingenious to bring on the inventor an accusation of dealing in magic and demonology—the established explanation in those days, of intellectual powers above the common comprehension.

Albertus Magnus, whose extraordinary acquirements procured him also the character of magician, was currently reported to have made a machine in the shape of a man, which was an oracle to him, and explained all the difficulties he proposed; an exaggeration probably of the fact that he formed a head of earthenware, "with springs capable of articulate sounds." It is said that his disciple, Thomas Aquinas, was so terrified at hearing it speak, that he dashed it into fragments on the ground. "There goes," said the philosopher mournfully, "the work of thirty years (perit opus triginta annorum)."

This instrument is likened by an anonymous author to the machines of Boetius, of which Cassiodorus said, "metals lowe, the birds of

Diomedes trumpet in brass, the brazen serpent hisses, counterfeited swallows chatter, and such as have no proper note from brass send forth harmonious music."

The celebrated Roger Bacon, who lived in the same century, is reported to have made a similar automaton.

How far these traditions are to be relied on, and how much they have gained in the telling, it is now impossible to decide; but it is the business of an impartial historian to state that which is doubtful, as well as that which is certain—what *may* be, as well as what *is*.

Athanasius Kircher, a famous Jesuit of the 17th century, who first described (probably invented) the *Æolian* harp, the speaking trumpet, and many other important acoustical instruments, asserted that he could make a statue, whose eyes, tongue, and lips should have a motion at will, which should pronounce articulate sounds, and which should seem living. He intended to have made such an one for Christina, queen of Sweden; but he relinquished his design, either for want of time or of money, or from the notorious caprice of that extraordinary woman.

During the last two centuries, speaking machines were frequently exhibited in Europe.

Thomas Irsen, an Englishman, exhibited to Charles II. and his court a wooden head, which excited great surprise. To questions whispered into its ear, it made answer by the lips in several languages. But while astonishment and speculation were at the highest, a popish priest was discovered by a page in an adjoining chamber answering through a pipe.

In the last century a figure of Bacchus seated on a barrel was exhibited at Versailles. It pronounced all the days of the week in a loud and intelligible voice, and wished the company good day. Many persons were deceived by it, because the owner of the machine allowed them to inspect the interior of the figure and of the barrel, where nothing was perceived but organ-pipes, bellows and chests, wheels, cylinders, &c. But the riddle was soon read; one person more inquisitive than the rest discovered a false wind chest, within which a dwarf was concealed, who transmitted his words, by means of a tube, to the mouth of the image.

Professor Beckman describes a Turkish figure filled in like manner with complicated machinery, but the voice, in this instance, was conveyed from an adjoining room.

There are two busts in the Lowther Scientific Gallery, placed at a distance of 135 feet from each other, but connected by a tube, so that a word spoken in the ear of one is heard at the mouth of the other. They illustrate very well the principle on which all these instruments depend. These instances will convey a tolerable idea of the ancient and modern speaking machines, which professed to have fully accomplished what had not yet been made the subject of a single experiment. The prevalence, indeed, of such deceptions had excited

so much suspicion, that when De Kemplen, whose experiments we shall presently describe, first announced his true speaking machine, a pamphlet entitled "The Speaking Machine and the Automaton Chess-Player detected and exposed," was published in London. (De Kemplen was the constructor of that well-known figure, the whole merit of which, he himself has acknowledged, consists in the ingenuity of the deception.) Having thus brought our historical notices down to the time of De Kemplen, we now come to the scientific consideration of the subject, which, however, we must defer to our next number.

THE

London Medical and Surgical Journal.

Saturday, June 27, 1835.

HINTS ON HOSPITALS, AND A FEW WORDS TO THEIR MEDICAL OFFICERS.

"Licuit, semperque licebit,
Parcere personis, dicere de vitiis."

FOREIGNERS when they visit this country universally express their surprise that a more efficient plan of medical education, especially in the clinical department, is not adopted among us. They aver, and with justice, that we most culpably neglect this important branch of study, and leave to chance or accident the observance of it by the professional student. Our curricula of education, they say, are loaded with regulations demanding from the medical pupil great sacrifices both of time and money, but scarcely mention a word upon the necessity of clinical attendance. They assert that the curriculum of the College of Surgeons in London looks much more effective on paper than it actually is; nor can we deny this assertion; for the College, say they, requires students to have pursued their professional studies for six years, but when one comes to examine in what way the six years have been appropriated, it is found that only a few months, say fifteen, of that period have been devoted to the actual study of the profession, while the

remainder has been passed in the menial drudgery of an apothecary's or druggist's shop. Thus four valuable years of the student's life, which might have been spent in preliminary useful education, are cast away in doing nothing, or worse than nothing; for that energy and elasticity of mind which are required in an individual to attain eminence in medical science, are damped, and too often rendered inert, by the slavish feeling of servitude which standing for years behind a shop counter induces.

The curriculum, again, of the Apothecaries' Company works ill with that of the College of Surgeons. A student when he comes to London in the first place obtains these curricula, which are drawn up without any reference to each other—he beholds the burthen which, between them both, is piled upon his shoulders, he endeavours to stagger on beneath its weight, and scrambles through his education in compliance with the regulations of the two institutions together. The consequence is that he undertakes more than he can perform, and, of course, neglects some portion, and, unfortunately, that which is for the most part neglected is what is really the most important to his future interests in his profession, namely, the attendance on hospital practice. It is true attendance on lectures helps a student to pass his examination much more than attendance on hospital practice, but the advantages in after life are decidedly on the side of attendance on the hospital. This observation applies to the mass of students, but those who stay a longer time in London pay a great deal of attention to the hospital; their number, however, is but trifling compared with the crowd whose means and time are curtailed to the minimum of both required by the College of Surgeons and Hall of Apothecaries.

Now this minimum of time, supposing that a tolerably sound preliminary education had been perfected, would not, perhaps, be too confined; but when a raw young aspirant for medical and chirurgical lore, just escaped from behind a counter in the country, arrives in town to prosecute his studies, he very seldom possesses more than a slight degree of pharmaceutical knowledge, joined to a modicum of English grammar, cyphering, and, it may be, a slender acquaintance with Latin. On his arrival "his troubles begin." He finds on perusal of the document from the Apothecaries' Society, that he is to be examined in Celsus and Gregory; this he sets down as a poser, and it troubles his mind. Next he goes to hear one of the innumerable lectures which it is his fate to wade through, and from his incapability of following a demonstration or deduction, or, perchance, understanding the technical terms used, he meets with another cause of disturbance. Going on in this way, a great deal of his courage and tranquillity leaves him, and a confusion of intellect, which endures a longer or shorter period, according to the strength of his nerves, ensues. Now a tolerable preliminary drilling in the classics and mathematics would obviate all this, and give comfort and confidence to his mind. The habit of study would enable him to follow out any given train of reasoning, and the technicalities occurring would be no longer stumbling blocks, eternally hovering over and delaying his progress.

A correspondent who, after noticing several of the *delicta* committed by our hospital authorities, lights upon the subject of clinical instruction, gives many hits at the said authorities. We have no room in this number for his communication, but can assure him that we agree in his inferences. The non-delivery of cli-

nical lectures regularly at the hospital of which he is a pupil *is a grievance*. The physicians and surgeons who have taken an ample fee from his purse, ought to give him some requital. They should afford him, what we suppose he intended to get at the time of bargaining with them, *some* return in the shape of instruction; the mere liberty of walking the hospital wards not being to be considered in that light. The delivery of clinical lectures daily at a convenient hour, ought to be rendered imperative on every physician and surgeon enjoying the principal charge of hospitals or infirmaries. In this way alone can they return to their pupils the value received from them. Any objection, at least any *valid* objection, to such a course of proceeding we are not aware of. It is no doubt necessary that the immense sums hitherto paid for nothing into the hands of the medical officers of hospitals and infirmaries should now begin to be acknowledged by these worthies in one way or other. The privilege of strolling at their heels through the different wards of an hospital, cannot certainly be considered as an equivalent for the fees paid into their hands by confiding pupils, and, therefore, they ought to rejoice that some means of repaying the same, in a way profitable to the interests of their pupils, can be held up to their view.

No return they could make seems more adapted to the purpose than the adoption of the delivery of a systematic course of clinical lectures. The advantages derivable from these by the pupil would be immense. Nothing in the course of his medical career would he call back to his memory in future life with more satisfaction and gratitude than these advantages; for, although he may reap much benefit from lectures on other subjects, nevertheless, those delivered, as it were, at the

bedside of the patient, on the practice of medicine and surgery, would be paramount in their beneficial influence on his after prospects in life. Certain and sterling knowledge would thence arise to him, and much of that confusion and doubt which not unfrequently hang over the commencing years of a young practitioner be obviated. Nothing, in fact, tends so much to the advancement of the medical student in his pursuits as well-directed and frequent clinical lectures. The surgeon in these would point out the most prominent characteristics of disease; and the pupil, knowing that they are the beacons by the light of which he must be guided when he comes to examine the affected subject, will carefully treasure them in his memory. The opportunity of comparing the substance of what he has heard with ocular demonstration, he will be aware, will soon be given, and this incitement will prevent that vagueness of attention which the narration of a long string of precepts and ill-drawn pictures of disease always creates; pictures in which, for the most part, only a few common-place traits are limned out, leaving all those peculiar but indescribable features which belong to the disease out of the canvas. It is, nevertheless, upon these main features, which elude the grasp of language, and are only to be comprehended through the agency of the sight, that the most accurate and therefore the most satisfactory diagnoses are often to be formed, and shades of maladies detected which would otherwise lie hidden in obscurity.

The seeing of cases, then, is of the highest importance to the medical student, when accompanied with that description of them and their treatment which an able professional preceptor is capable of giving, and both these operations com-

combined constitute clinical instruction; observation is superadded to description, and experience is the result of both; theory and practice, as they always should do, illustrate each other, and sound information is their fruit.

Again, the viewing of a disease to be described—let us suppose it to be a tumour, an ulcer, or any external affection—is of the utmost assistance to the student, in comprehending those portions of its description which are to be considered abstractedly from form and dimension. One operation of the mind is by these means supplied without effort—the disease has been seen—its form and complexion noted, *oculis fidelibus*, and a map of it formed in the brain, to which reference may be readily made afterwards, as occasion may require and the remarks of the instructor demand. The mental powers are assisted in the same manner as when a mathematician draws a figure of the subject of his calculations to render more easy the settlement of its different bearings; or as when a geographer, wishing to delineate the peculiarities of a country, places the plan of it before the eyes of his auditors, and thereby gets rid of tedious and troublesome reiterations denoting position and shape. The eye in both instances is appealed to and performs its office; and that effect which words, however dexterously applied, could but ambiguously produce is rendered certain. Now, it is the same with the portraiture of diseases: let a man see the subject afflicted, and hear a moderately faithful relation of the symptoms, and he will have a pretty clear comprehension of what is going on; he will recognise a similar case in future. But give him dry lectures, without the opportunity of using his eyes and confirming or correcting by observation the dimly-defined ideas which he has drunk in at

his ears, and it is highly probable that, on the first opportunity, he commits some egregious mistake in his diagnosis and, consequently, treatment.

It may be said that words represent things, and that it is the property of a clear and vigorous intellect, knowing its subject, to be able, by the force of words, to impress on the minds of others the ideas which are stamped on its own. Such reasoning, however, implies that there should exist in the recipient minds a capability, a degree of strength and aptitude, a wakefulness, to receive impressions which are not always to be found; and should an idea be either inadequately or erroneously impressed, what is the consequence? This one false or cloudy impression, this incongruity with the meaning of the orator, would be the fertile source of a tissue of errors, the extent of which would be proportional to the measure of difference between the idea intended to be conveyed by the orator and the hearer's conception of it. The fact is, whatever lecturers may presume to say, that were the mental faculties a blank scroll (as a great luminary on the nature of the mind supposed them to be), on which their conceptions as they arise are depicted, and half a dozen of these scrolls (each scroll belonging to a medical student) were unrolled directly after the lecturer had impressed them through the medium of the *auditory* nerves, there would be a dissimilar impress discovered on each; while, were the visual nerves the medium, the result would be a perfect and similar representation in all.

It may be considered by some of our readers that we have somewhat digressed from our subject; we hope to pacify them by returning to it. Let us be permitted, however, *en passant*, to declare that our motive in digressing was to show the superiority of the clinical to every other

mode of imparting medical knowledge. We now proceed. The physicians and surgeons then of every hospital, to which a medical school is attached, and infirmary, throughout the country, should commence to deliver *daily* clinical lectures to those gentlemen who have so liberally feeced them. In large hospitals, such as St. Thomas's, Bartholomew's, &c., each principal surgeon and physician should take his turn in the theatre by rotation; and, instead of satisfying his conscience by paying a flying visit of an hour's duration or so *per diem*, resolve to do justice, and in requital for the large sums pocketed return something to which value may be attached. No boon could be granted more advantageous and acceptable to the student than a regular system of clinics; and we ardently hope that, before long, they will be insisted upon as an indispensable preliminary to examination for the diploma or licence; this would render imperative their delivery by those whose supineness or obstinacy has hitherto blinded them as to the necessity of adopting such a course. Aided by them the student's professional attainments would become more practical and solid, his attention be more rivetted to his studies, and his intellect, exercised in a healthy mode of thinking, acquire a degree of strength and vigour, which may be in vain looked for while the present diffuse, verbose, and pointless system of lecturing is pursued.

TO OUR CORRESPONDENTS ON THE
POOR-LAWS MEDICAL REGULATIONS,
AND ON QUACKERY.

For the encomiums we continue to receive from our correspondents, respecting the views we have taken of the blighting influence of the Poor-Laws Commissioners and their host of assistants upon the respectability and interests of our profes-

sional brethren, we beg leave to offer our sincere acknowledgments. Our exposure of some of the tortuous operations of quackery has also increased the number of our well-wishers and allies, to whom we now reiterate our pledge that, when and wheresoever we discover abuses directed against the welfare of our body, we shall strenuously endeavour to correct by displaying them; but when we perceive anything which has a tendency to the improvement of our science and its members, we shall as anxiously strive to foster and encourage it.

MEDICAL JURISPRUDENCE.

SUSPECTED MURDER.

Knitting-needle Case, ten inches long, found in the Abdomen.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—If one of your contemporaries had taken the trouble to inquire into the particulars of the case upon which he so learnedly dilated last week, he might perchance have shown more liberality, and certainly would have written more correctly. As, however, the magistrates, coroner, and jury were satisfied with the evidence, I should not have taken the trouble to allude to the above mentioned article, but that the case appeared sufficiently uncommon to merit publication.

I am, Gentlemen,
Yours, obediently,

MARK NOBLE BOWER.

16, *Wilmington-square,*
June 22nd.

On the evening of Friday the 5th of June an insane woman named Sibley took her child, æt. 9, to a medical man, who afterwards stated on evidence that it was labouring under great difficulty of breathing, and appeared almost suffocated. Without waiting for medicine the mother snatched up the girl and ran off with it to her home. From that time until Sunday afternoon the child was not seen, but about three o'clock on the latter day, suspicions having been excited, the door was burst open, when the child was found concealed beneath the mother's petticoats quite dead. The room-door was locked and a policeman stationed at it during the evening and night, and on Monday morning I examined the body in the presence of two medical men. There were no external marks of violence, but a wooden knitting-needle case was discovered protruding from the vagina. On opening the abdomen, it was seen that this instrument, which was about ten inches long, after passing through the

right wall of the vagina had entered between the layers of the mesentery and had reached as far as the under surface of the gall-bladder. The portion of the ascending colon, which lay in immediate contact with it, was highly inflamed, whilst the general mass of intestines was not so affected. On the left side of the abdomen there was a patch of mortification, as large as a shilling, in the jejunum, at a considerable distance from the needle case. The liver was gorged with blood, as also were the right cavities of the heart and the lungs. There was a false membrane thrown out in the larynx immediately beneath the chordæ vocales, and the lining membrane of the trachea and bronchial tubes was evidently much inflamed. There were no traces of disease in any other part of the body. Judging from the inflammation found in the colon, where it was in contact with the wooden case, we were of opinion, at first, that the instrument might have been passed before death, but did not state positively that such was the case, or that it was the cause of death. After maturely considering all the appearances observable, and all the circumstances, I was induced to alter my opinion, and the following were my reasons for so doing.

1st. It was proved that the child was, and had been for some time, labouring under croup, and the appearances found were those which the body of a person dying from that disease would exhibit.

2nd. Although the active inflammation in the neighbourhood of the instrument was suspicious, still as a spot of mortification was also found, it was clear that inflammation must have been going on for some time.

3rd. There was not the slightest hæmorrhage, although the surrounding parts had been seriously injured.

4th. No screams were heard by the persons residing in the next room, although they had been on the spot all the time between Friday and Sunday.

5th and lastly. The woman, who had always displayed great kindness to the girl, stated, that having heard of the virtues of steel and wood she had passed the instrument after death, for the purpose of "bringing her round," as she called it.

The coroner and magistrates were satisfied, from this evidence, that the case was passed after death, and accordingly directed that the mother, who was evidently of unsound mind, should be sent to an asylum.

CLINICAL INSTRUCTION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—Allow me to draw your attention to one branch of medical study, which is more neglected in this country, or I should rather confine myself to this metropolis, than any other in the world. I allude to Clinical Instruction. Many informed me previous to

my coming to town, that I should learn more from attending to "clinical instruction" than from any of the lectures on the practice of medicine. It is true, by hearing good practical clinical Lectures much information may be gained; but when these lectures are only given once a-week, and then perhaps confined to one out of twenty cases in the wards of the hospital, the information is not what it ought to be, or what I expected for the fee I was obliged to pay, both for the surgeon's and physician's practice to the hospital. Besides, by the regulations of the Apothecaries' Company, I am compelled to attend twelve months, and for such attendance I am compelled to pay a proportionate fee to the surgeons and physicians. Why, then, if I am compelled to do this, should not I, as well as my fellow-students, *compel* those officers of the hospital to give us the clinical instruction, for which they pocketed our fees, throughout the year; and, gentlemen, allow me to say, that those practical lectures should be given regularly every day; then a student would stand some chance of walking the hospital to advantage. By your inserting this in your liberal Journal you will oblige not only myself but a number of my fellow-students.

I am, Gentlemen,

Your obedient servant,

June 20th. A STUDENT OF ST. GEORGE'S.

British Hospital Report.

NORTH LONDON HOSPITAL.

Clinical Remarks on Fever.

BY PROFESSOR ELLIOTSON.

I SHALL speak this morning, gentlemen, on some cases of common continued fever which have been in the hospital: they were simple inflammatory cases, characterised by pains in the head and abdomen, tenderness on the epigastrium, sometimes increased by pressure, vomiting and loss of appetite, either purging or constipation, stupor and apprehension, and, in some cases, delirium. I would have you notice, that in inflammations and numerous other diseases the local affections are most frequently parallel with the general disorders, while in fever they are completely out of proportion, there being sometimes violent local affection with little general derangement of the system, while in others it is quite the reverse.

The first case I shall notice is that of Hannah Paine, æt. 19, a servant, admitted April 15th. She was affected by alternate shiverings and flushings, pain in the back and loins, a throbbing pain in the head, giddiness, and pain in the abdomen increased on pressure. Tongue red and coated, urine scanty and high coloured, pulse 100, soft. Twenty leeches were applied to relieve the pain in the abdomen, and three grains of calomel given every four hours; she was also well washed. On the 18th the pain was relieved, though

tenderness and a shooting pain remained in the abdomen; the bowels were open, and the urine more copious. On the 20th the abdomen was free from pain, but there was tenderness under the sternum. To relieve this six leeches were applied. On the 25th she was better; there was no cough, and all the other symptoms had been removed. She was ordered a pint of milk per day, which she continued to take till she left the hospital.

Many of you will recollect the case of Harriet Davis, *æt.* 24, cook, admitted May 1. She had caught cold a fortnight before her admission while engaged in her employment, and when I saw her she had pains in her back, loins, and abdomen, similar to the case I have just related. Her mouth was dry and clammy, the urine high coloured, and filled with deposits, and, what always denotes an affection of the brain, heavy eyes, with throbbing of the temples. Her head was shaved; she was bled to twelve ounces, and twenty leeches were applied to the temples. She took ten grains of calomel and half an ounce of castor oil every hour until the bowels were relieved. On the 1st of May I ordered her five grains of calomel every day. The next day she was better, though on the 3rd she had some epigastric tenderness, which ten leeches removed. On the 5th the mouth became tender, and on the 7th the calomel was omitted. A blister was applied to the chest to relieve some difficulty of breathing, and she was allowed milk. After this she got on very well.

The case up-stairs, admitted yesterday, is precisely of the same character as these two. There was no evidence of contagion in either, both apparently arising from cold.

In curing cases of fever, you must lessen the local inflammation by local depletion, unless the patient be young and strong, when bleeding from the arm is advisable, particularly in hot climates, where fevers arrive at a climax in a much shorter time than in this country. If the patient is thin and weak, or old, it will be sufficient to starve, and send him to fresh air; to clear the stomach by an emetic; open the bowels; and remove local affections by local remedies. I have found washing with cold or tepid water of the greatest benefit, as it removes any incrustations of dirt, or dried perspirations, thereby freeing the pores of the skin, and giving free action to the exhalant vessels. Cold affusion and ablu-tion are also of infinite service when they do not produce shivering, and the patient is strong enough to bear either; but sponging only must be used if there is much weakness, as great danger is frequently incurred by taking the patient from the bed while in a state of great debility. The cold water ablu-tion should not be used without first ascertaining if the temperature of the body be above 98, by placing a thermometer under the tongue; but there is no such precaution necessary when you contemplate sponging. The bowels must be kept open, as the matter absorbed from the

facès, whilst in the bowels, strongly tends to produce the putrid type of fever; but purges must not be given without due caution, as there is generally a good deal of irritation of the mucous membrane of the intestines during a fever, which violent purges would probably make a highly dangerous symptom. Mercury should also be given in small quantities: it cleanses the tongue, and is altogether of great benefit. The strictest cleanliness must also be enforced.

A short time since there were two patients in the ward, both young girls, who had each an attack of fever, though neither of them in a violent degree. I treated them in the usual manner, and they got pretty well, but complained of great weakness, and, when they stood, their limbs shook violently. Now, gentlemen, not expecting any deception, I was a little puzzled at this, as I had never seen anything of the kind before when there had not been sufficient affection of the brain during the attack to account for it, which there was not in either of these cases. So I gave one of them $\mathfrak{z}\text{ij}$ of the subcarbonate of iron two or three times a-day, and the other shower-baths. They both professed themselves to be relieved by the treatment, but still the shaking continued. This being the case, and the circumstance of their both being in one ward, began to shake my good opinion; and the more they shook, the more it was shaken, until at last it was quite shaken out of me. I also observed that, when they were led into the middle of the ward, they did not drop till they had scrambled back to their bed, and there they would fall. I then gave them some broad hints, which they would not take, and then considered myself justified in ordering each a large blister over the loins, and a filthy mixture of *asafoetida*, which you may be sure soon cured them. There was also another case of deception in the hospital last week. A man, who it appears has been affected with tape-worm, and therefore very capable of describing the usual anomalous symptoms, was admitted as suffering from that affection. I gave him $\text{ol. terebinth. } \mathfrak{z}\text{ij}$, followed by $\text{ol. ricini, } \mathfrak{z}\text{ss}$, until it had worked off, which not bringing any worms away was repeated two or three times. This being also unsuccessful the man's manner and appearance convinced me that he was counterfeiting, so I ordered him a blister and the *asafoetida* mixture, which quite cured him. In cases of counterfeiting, you will generally find that a blister, and the most filthy articles in the materia medica, will produce a wonderful change for the better.

After this digression, I shall proceed to remark on a case which ran on to typhus. The name of the patient was Hannah Owen, aged 20, admitted May 12th. She had pains in the head, abdomen, and back, and much tremor; the tongue trembled a good deal, which you will frequently observe in cases of tremor arising from debility. Her skin was hot, face flushed, and tongue coated with white fur; pulse 90, and full. I had her well

washed and her head shaved, and ordered her hyd. c. creta, gr. v., every six hours. I gave the hydrarg. c. creta in this case as being less likely to purge than calomel, which would have been highly dangerous in the state of debility in which she was; I also put her on middle diet.

On the 13th, the heat and thirst had diminished, but the abdominal pain continued.

14th. The pulse was 110, and weaker, and there was a slight sonorous rattle in the bronchiæ.

15th. There is still a good deal of pain, debility, and excitement. Pulse 120; tongue very dark, and she had one loose stool. Being the case, I ordered her strong broth, and two pints of milk every day, with three grains of quinine every four hours, and a draught, composed of pulv. kino, gr. v., mist. cretæ, ℥iss., to be taken after every loose motion; also two ounces of wine every day.

16th. Much the same, but on account of the pain in the abdomen, and also to prevent the wine from increasing any inflammation there might be, I ordered her a blister to be applied to the abdomen; I also increased the quantity of the wine to an ounce every three hours.

17th. The weakness still continuing, she had an ounce and a half of wine every three hours.

18th. The pain still remained in the abdomen; pulse 130; bowels open, and face flushed. At this stage, you see, I had great reason to fear that she would sink, but I was agreeably surprised on the 19th to find her better; pulse only 110.

20th. Pulse was only 100.

21st. The skin was cooler, and tongue cleaner; pulse 80; but, the debility continuing, the hyd. c. creta was discontinued, and I trusted the cure to the beef-tea, wine, and milk, with four grains of quinine every four hours.

On the 24th, the quinine and wine were omitted, and she took meat and potatoes.

On the 26th she was better; pulse 60, and on the 30th I gave her half a pint of stout per day.

The report goes on, gentlemen, noticing her gradual improvement until she was perfectly restored to health. In treating typhus, you must not bleed, blisters being of more service in reducing inflammatory symptoms. You must also support your patient by wine, quinine, &c., as I said in this case. These cases of low typhus are so very rare that it is two years since I met with one, which was at St. Thomas's Hospital, and the only difference I made in the treatment, was to give nitre and the other saline medicines recommended by Dr. Stevens; but I did not place sufficient confidence in the theory that typhus depended on the want of salts in the blood to give up the established method of supporting the patient, and trust only to the salines, but I gave them with the same treatment that I

adopted in the case of Owen. Perhaps you may know that Dr. S. asserts that quinine cures in typhus, on account of its being a neutral salt, and not on account of its tonic properties. Whether it is so or not I cannot say; I can only tell you that I never gave it with that view myself. I did not trust wholly to the salines, as I consider that, when we have a plan of treatment founded on reason, which is likely to prove successful, it is highly culpable to experimentalise on patients; and if a patient had sunk under this plan who I had imagined might have been saved by the established method, I should have looked upon myself as a murderer. I should wish to impress this strongly on your minds, as, if observed, it will probably preserve you from much uneasiness and disquietude.

A few remarks as to the general theory of fever, and also on the mode of administering stimulants when they are necessary, will here be of use to you. Now, as to the theory, many have supposed it to be a constitutional derangement, arising from some local affection. The supporters of this doctrine, however, did not agree as to the situation of this local affection. Dr. Clutterbuck, and others who flourished long ago, asserted that it was in the brain; and the generality of French physicians have fixed upon different parts of the abdomen as the seat of the first cause of fever. But I think you will perceive that this case has proved this theory to be totally incorrect. The only symptom of any affection of the head was a little heaviness of the eyes, which was not much more obvious, however, than when she was in perfect health, as she was a dull, stupid sort of woman. And really the tenderness which there was in the abdomen was, as I told you, infinitely too slight to account for a title of the violent symptoms from which she suffered. Perhaps you will recollect that a blister quite removed it. I think these facts are quite enough to prove to you, that though fever may and does arise from local causes, yet that it does not depend upon them but is a disease *sui generis*.

I also intended to remark, in my last lecture, that much greater benefit is derived from stimulants when gradually administered, than when given in large proportions at once. For instance, if you intend giving twelve ounces or a pint of wine in the course of the day, it will be much better to give it every hour or two, than in two or three doses only. You should observe the same rule also in administering the nourishment, as although when we are well we fast several hours without inconvenience, yet in sickness we require aliment much more frequently; indeed, I have seen some patients sink in typhus because this precaution was not observed. The nurse in that ward is an exemplary woman, and has saved many of my patients at St. Thomas's by attention to my orders to administer the broth, wine, &c., very frequently, as I did in this case with such good effect.

MISCELLANEOUS.

M. Breschet has been elected a member of the Paris Academy of Sciences, to fill the place of M. Dupuytren.

Botany.—Dr. Burge, who is attached to the Russian Embassy at Peking, has observed four hundred and twenty plants in North China, fifty-nine of which are cultivated in Peking and its environs; some are from Japan and Southern China, being varieties of the orange camellia, chrysanthemum, rose, &c., and many from European gardens; but if these be taken away, Dr. Burge establishes three hundred and sixty-one indigenous species, ninety of which are also common in Europe, but one hundred and thirty-six are entirely new to science. One most worthy of cultivation is a species of horse-chestnut, with long bunches of flowers, consisting of four petals, and the *citrus microcarpa*, the fruit of which is rather larger than a chestnut.

Chemistry.—A new organic substance has been discovered in the bark of willow, apple, pear, plum, and cherry trees, by MM. Koninek and Slas, which they have named chloridzin. It is more soluble in hot than in cold water, very soluble in alcohol and æther, and soluble without decomposition in sulphuric or hydrochloric acid, also in nitric acid, leaving a yellow precipitate.

Potatoes.—Dr. Mitchell, of New York, has discovered a new potato, the flower of which is analogous to that of the *solanum montanum*. It might be easily reared in our climates. This is an important discovery, as potatoes are likely to be consumed in much larger quantities than at present, M. André Krieg of Augsburg having produced various sorts of wine, vinegar, beer (which keeps well), very pure brandy, sugar, and food for cattle from the common potatoe.

Paper.—M. Pallas, of St. Omer, has sent a specimen of a new kind of paper to the Academy of Sciences, made from the parenchyma of Indian corn, after the saccharine matter had been extracted. The natural mucilage of the plant gives it a sufficiently firm texture without the use of size.

Dr. Hancock, in his pamphlet on British Guiana, while alluding to the Rio Negro Sarsa, disclaims all connexion with the patent preparations of that drug sold under his name. This is as it should be.

APPOINTMENTS.

Naval.—Mr. G. E. Forman, surgeon to the England convict ship. Mr. J. A. Mould, assistant-surgeon of the Spartiate, to be acting surgeon of the Challenger, vice Kay, invalided. Mr. George Williams, reappointed surgeon to the Vestal.

Military.—Staff Assistant-Surgeon Jas. Campbell, to be surgeon of the 28th Foot, vice M. Galeani, M.D., appointed to the 46th Foot. Surgeon James Paterson, M.D., from the 46th Foot, to be surgeon of the 4th Foot, vice Nicholson, appointed to the Staff. Surgeon Michael Galeani, M.D., from the 28th Foot, to be surgeon of the 46th Foot, v. Paterson, appointed to the 42nd Foot. Hospital Staff—Surgeon Brinsley Nicholson, from the 42nd Foot, to be surgeon to the Forces, vice Robert Scott, who retires upon half-pay; Richard Houston Everard, M.D., to be assistant-surgeon to the Forces, vice Campbell, promoted to the 28th Foot.

General.—Dr. Robert Stewart to be manager of the Lunatic Asylum, Belfast.

Resignation.—Dr. Benjamin C. Pierse, of St. Helen's-place, Bishopsgate, physician to the British Orphan Asylum, Clapham-Rise.

DEATHS.

Mr. William Little, of Howick, Scotland, surgeon. Mr. T. G. Coombe, of Newcastle-under-Lyne, surgeon to the North Staffordshire Infr-

mary. Mr. John Wilcocks, of Borris, County Carlow, surgeon to the dispensary there. Dr. William Hall Gilby, of Wakefield. In Dumfries, Mr. Thomas Haugh, assistant-surgeon of the Inverness-shire regiment of militia.

WEEKLY BILL OF MORTALITY.

London, Tuesday, June 23, 1835.

Abscess	1	Inflammation of the	
Age and Debility	26	Bowels & Stomach	10
Apoplexy	4	Inflammation of the	
Asthma	5	Brain	4
Consumption	45	Inflammation of the	
Convulsions	24	Lungs and Pleura	6
Croup	4	Insanity	2
Denitition, or Teeth-		Liver, Diseased	2
ing	3	Measles	4
Dropsy	6	Mortification	3
Dropsy on the Brain	14	Paralysis	1
Dropsy on the Chest	1	Rheumatism	1
Fever,	3	Small Pox	8
Fever, Typhus.	1	Spasms	2
Gout	1	Thrush	1
Hæmorrhage	2	Unknown Causes	13
Hooping-Cough	13		
Inflammation	17	Stillborn	18

Buried, Males 136 Females 114 Total 250

Decrease in Burials reported this week, 111.

LITERARY INTELLIGENCE.

Outlines of Pathology. By HERBERT MAYO, F.R.S., Surgeon to the Middlesex Hospital, Professor of Anatomy in King's College, London, &c., &c.

This work will consist of two parts, the first of which, relating to the diseases of the bones, joints, muscles, nerves, spinal marrow, and brain, will be published in September. The second part will appear early in next year.

CORRESPONDENTS.

Investigator.—Until we obtain the symptoms of the case called Hydrophobia, which terminated fatally at the London Hospital, we must suspend our opinion as to whether it was that malady or not.

Mina.—We are informed by a gentleman just arrived from Bilbao, that the wound represented to have been received by General Zumalacarreay, of a serious nature, is but a superficial flesh wound.

Nadir.—His communication is not suited to our pages; it is left at our office for him.

Philocanis.—There is not an atom of truth in the absurd rumour that nine cases of hydrophobia occurred last week in the Westminster New Hospital. Such paragraphs are only invented for the purpose of filling an accidental chasm in certain journals.

Z.'s invitation is accepted.

Acies.—The want of a mutual understanding in drawing up their circular of education between the College of Surgeons and the Hall of Apothecaries, has been much complained of. *Acies* is not worse off than his contemporaries, and he must put up with his ill-luck until wiser times.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At Sir Patrick Dun's Hospital during the Session of 1834-5.

LECTURE XVIII.

GENTLEMEN,—It is my intention to-day to make a few observations on the scarlet fever which now prevails as a destructive epidemic in Dublin and many other parts of Ireland. The history of such epidemics is very interesting, and tends to shed much light, not only upon the changes which diseases undergo, but upon the fluctuations of medical opinions and treatment. In the year 1801, in the months of September, October, November, and December, scarlet fever committed great ravages in Dublin, and continued its destructive progress during the spring of 1802. It ceased in summer, but returned at intervals during the years 1803-4, when the disease changed its character; and, although scarlatina epidemics recurred very frequently during the next twenty-seven years, yet it was always in the simple or mild form, so that I have known an instance where not a single death occurred among eighty boys attacked in a public institution. The epidemic of 1801-2-3-4, on the contrary, was extremely fatal, sometimes terminating in death, as appears by the notes of Dr. Perceval, kindly communicated to me, so early as the second day. It thinned many families in the middle and upper classes of society, and even left not a few parents childless. Its characters seem to have answered to the definition of the *scarlatina maligna* of authors, for a description of which I beg leave to refer you to the Cyclopædia of Practical Medicine, where you will find an article on the subject by Dr. Tweedie. In making this reference, however, I do not wish to be understood as expressing my unqualified approbation of the article in question, for I must in candour confess that it falls far short of what we might have expected from a physician of

Dr. Tweedie's learning and experience. The long continuance of the period during which the character of scarlet fever was either so mild as to require little care, or so purely inflammatory as to yield readily to the judicious employment of an antiphlogistic treatment, led many to believe that the fatality of the former epidemic was chiefly, if not altogether, owing to the erroneous method of cure then resorted to by the physicians of Dublin, who counted among their numbers not a few disciples of the Brunonian school; indeed, this opinion was so prevalent, that all those whose medical education commenced at a much later period were taught to believe that the diminished mortality of scarlet fever was entirely attributable to the cooling regimen, and to the timely use of the lancet and aperients, remedies interdicted by our predecessors. This was taught in the schools, and scarlet fever was every day quoted as exhibiting one of the most triumphant examples of the efficiency of the new doctrines. This I myself learned—this I taught; how erroneously will appear from the sequel. It was argued that had the cases which proved fatal in 1801-2 been treated by copious depletion in their very commencement, the fatal debility would never have set in, for we all regarded this debility as a mere consequence of previous excessive reaction. The experience derived from the present epidemic has completely refuted this reasoning, and has proved that, in spite of our boasted improvements, we have not been more successful in 1834-5 than were our predecessors in 1801-2.

Before I detail more particularly the symptoms that accompany the present epidemic, I wish to enter a little at large into the subject of the changes and variations which the same disease is observed to undergo at different periods of time. This is a topic which occupied some of the master minds of antiquity, and upon which the greatest of modern physicians, the illustrious Sydenham, bestowed considerable labour. It has been too much neglected of late, and consequently I consider it my duty to call your attention to it, and I cannot do this better or more forcibly than by communicating to you a literal translation which

I have made from the German of my friend, Dr. Autenrieth's observations on this subject. The task of translation is always not only difficult but irksome; but if, as in the present instance, I can by this means convey to you valuable information not before presented to my class or to the public in English, I never decline the labour. What I am now about to read is indeed most important, and well deserves the deep attention of every practical physician.

The third cause, connected with time and capable of modifying diseases, is of infinite importance, both in a theoretical and practical point of view, but has seldom attracted much attention. Its existence is attested by its effects alone, for its nature remains unknown. I allude to the *constitutio morborum stationaria*, first noticed by Sydenham, but, since his time, nearly forgotten or else confounded with the permanent influence of the seasons, or the accidental atmospherical changes spoken of above. All diseases, contagious and non-contagious, acute and chronic (the latter however seldom, except when attended with some degree of general excitement) have been observed to preserve a certain *constitution or general character*, which continues for a number of years in succession, with occasional interruptions, until it is displaced by another constitution of a different character. Thus, during one period, diseases are remarkable for being frequently accompanied by a sensation of extreme weariness, sudden sinking of the strength and vital powers unpreceded by any evident marks of excitement, and attended by a disposition to pass into true typhus. During another period the tongue is in general loaded with a thick white or yellowish coat, and many other symptoms of derangement in the digestive organs, such as a bitter taste, costiveness, or diarrhæa, are constantly observed.

During a third period, diseases are characterised by a remarkable degree of vascular excitement, an evident tendency to local determinations, a frequent formation of morbid productions, in a word, by all the symptoms of inflammation.

It is not known whether the transition from one of these periodic constitutions to another takes place suddenly or gradually; but the latter supposition appears more probable, except when the transition is accompanied by unusually great atmospherical changes. The erysipelatous affection, which both in England and Germany succeeded the gastric and accompanied the first appearance of the inflammatory period, seems to have been an example of the gradual transition. Accurate observations are still wanting to determine whether this periodic constitution is confined to certain parts of the world or extends over the whole, and whether its different species follow each other in a regular order of succession. If their order of succession should at any time be determined, it will enable the physician to foretel the character and most

appropriate treatment of future diseases. The above question cannot be answered without very great labour spent in the investigation of the history of diseases in all ages and all countries, and are therefore foreign to the present work.

The general indications of course vary with the nature of the prevailing constitution; and, consequently, during one period stimulating remedies, during another alvine evacuations, and during a third venesection and the antiphlogistic plan, will constitute the most effectual treatment.

This very circumstance has caused much confusion in medical opinions, and has occasioned the reputation and the downfall of many an infallible system, each of which is in its turn consigned to oblivion, and perhaps again revived as a novelty at some future period. The English boast much of the astonishing improvements in science, and deride the ignorance of their predecessors, regardless of the old proverb—"Every thing has its day." Whenever, therefore, the periodic constitution undergoes an alteration, they either obstinately uphold their usual plan of treatment to the manifest injury of their patients, or else blindly embrace some system, to them new, but which really rests upon ancient and established principles. In general, they do not fail to make use of so much exaggeration in support of their opinions, and thus succeed in misleading so many, that none but very well informed physicians can distinguish the fallacy of their arguments.

The medical history of Great Britain affords many striking proofs of the truth of these assertions, and is replete with examples of the singular obstinacy with which the English cling to opinions once formed, a circumstance which has materially contributed to obstruct their attaining to general views and impartial conclusions. Even to this day a warm contest is carried on (less, however, in books than in the debates of learned societies) between the senior and the junior parts of the profession, the former still inclining to Brunonianism, while the latter attribute nearly all diseases to inflammation. Both, indeed, appeal to experience to prove the justice of their principles, and seem entirely to forget that while the propriety of their practice, as applied to particular cases, remains unimpeached, the very nature of the diseases themselves may have been changed. A summary review of the character assumed by diseases during the last twenty years, both in England and other countries, will perhaps afford a solution of this question. About the end of the last and during the three or four first years of the present century, the proportion of nervous fevers to other diseases was as one to eighteen in Plymouth (Woolcombe), as one to sixteen in London (Willan), as one to ten in Newcastle (Clarke), and in Liverpool, one to five (Curry). Nor was this scourge of mankind less severely felt upon the continent, where

typhus, and diseases closely allied to it, committed extensive devastations, particularly during the epidemics of Erlangen, Jena, Kiel, Ratisbon, and Vienna. Cadiz and Seville were at the same period depopulated by the yellow fever, and Europe in general suffered much from repeated visitations of influenza. An inclination to a sudden sinking of the vital power, unpreceded by violent reaction and unaccompanied by any marked symptoms of a gastric or inflammatory nature, constituted at that period the characteristic form of acute diseases, which were always preceded and attended by an unaccountable degree of debility. Stimulating and tonic medicines obtained therefore much celebrity, and every physician who practised during that period attests the injurious or even fatal effects which were produced by the use of venesection and other depletory remedies. What is still more remarkable, an epidemic typhoid pneumonia prevailed in many parts of Germany during the years 1800-1-2, in which the speedy production of an inflammatory state by means of bark and æther was the only method which afforded a chance of recovery. These facts must impress every impartial mind with the conviction, that the constitution of diseases has undergone much alteration since that period, and explain why physicians did not then employ copious venesection, but were obliged to content themselves with ordinary cold affusion, acids, and mercury.

The reign of typhus appears to have ceased with the influenza of 1804, when a new constitution began, at first more remarkable for the disappearance of nervous fevers and other contagious diseases, than for any peculiar character of its own. Catarrhal and rheumatic complaints, partly attributable to the weather, prevailed for some time, and fevers of an intermitting type became more frequent, forming an evident transition from the purely typhous constitution to that of the vascular excitement of the following years. Some remnant of the typhous constitution was indeed still perceptible in the pectoral complaints which prevailed in London during the winter of 1804-5, and were attended with remarkable debility, requiring the greatest prudence in the use of the lancet. Venesection was indeed often entirely contra-indicated, and Bateman states that it sometimes even proved fatal. The constitution, however, soon developed itself more decidedly, became more universally diffused, and obliged physicians to relinquish their former plan of treatment and adopt other measures. Derangement of the alimentary canal became its prominent feature in the summer and autumn of 1804, and diarrhœa, terminating in dysentery was often met with.

This constitution suffered indeed a check from the cold of 1805, but it increased again during the following years, and afterwards became still more prevalent, manifesting itself

by headach, a bitter taste in the mouth, a loaded yellow tongue, irregularity of the bowels, nausea and anorexia. The utility of purgatives now became so obvious, that Hamilton's doctrines soon obtained as much celebrity as had been before enjoyed by the stimulating system. The nervous fever at Nottingham in 1807, the dysentery at London in 1808, the scarlatina at Edinburgh in 1805, and the measles at the same place in 1808, all required the purgative plan of treatment, and calomel became the favourite cathartic. The advantage then derived from the use of purgative medicines is abundantly testified by the writers of that period. This gastric constitution appeared also on the continent, but its progress was less rapid there than in England, where the inhabitants live in a manner calculated to augment or even to produce a tendency to gastric diseases. There were likewise other circumstances which impeded the formation of this constitution on the continent. Thus in Germany, the purely nervous constitution had scarcely yielded to catarrhal and rheumatic affections, when it was again revived in that unhappy country by the political occurrences of 1805-6-7. Typhus seldom, however, assumed the character of exquisite, for the rheumatic and catarrhal affections with which it was mixed partook somewhat of a gastric nature, as was proved by the great benefit derived from the exhibition of emetics and calomel. This appears in accordance with the fact that the gastric constitution was more fully developed wherever the ravages of war had not extended, although it still required less attention in the treatment than the rheumatic symptoms, then likewise prevalent. Thus the agues which were common at Tübingen about the end of 1806, commenced in general with pain in the belly, vomiting, and irregularity of the bowels; a yellow furred tongue, headach, and tremors of the parotids were of frequent occurrence, and in general gastric symptoms were by no means rare. These symptoms gradually gained ground, and the reputation of ipecacuanha and cathartics increased in the same proportion. At Ratisbon the constitution was remarkably gastric in the autumn of 1809, and a nervous fever prevailed at Weimar in 1809-10, which was accompanied by bitter taste in the mouth, diarrhœa, nausea, and vertigo. Active catharsis was injurious in this epidemic, but much benefit resulted from the exhibition of castor-oil. The advantage derived about the same time in Berlin from the treatment of fevers by emetics and cooling purgatives, proved that they were there also complicated with gastric derangements.

The gastric constitution had scarcely established itself, or become pretty generally diffused, when a new character, viz. the inflammatory, appeared upon the stage, and has ever since continued, sometimes combining itself with the gastric to form diseases of a

mixed character, such as erysipelas, and sometimes, when favoured by the seasons or local circumstances, raising itself to the rank of the chief performer. With its appearance, venesection, which had previously fallen into disrepute, became once more a favourite remedy, and in the course of a few years was pushed so far, particularly in Great Britain, that Sangrado's maxim, "C'est une erreur de penser que le sang soit nécessaire à la conservation de la vie, on ne peut trop saigner un malade," seems to have been the general rule of practice. The same inflammatory constitution became also general in Germany, but there it neither attained such a height nor required such active treatment as in Great Britain, where many circumstances favoured its more perfect development; with us it generally yielded to the use of acids, cold applications or mercury, but in England it called for copious blood-letting. Even in 1810, diseases had become more inflammatory at Tübingen than they had been previously; but the change was still more perceptible in 1813, when the antiphlogistic treatment required the aid of small venesections, and nervous fevers were accompanied both by inflammation and derangement of the digestive organs. Erysipelatous affections were also frequent, and in many cases were of a marked inflammatory character. Erysipelas and true inflammatory fever, requiring the use of the lancet, were common at Ratisbon in 1811; Parrot exhibited acids, especially the acetous, with great success in the epidemic nervous fever which raged at Dorpat in 1812, and a diarrhoea of a bilious inflammatory nature prevailed at Königsberg during the same year. This important change in the *constitution*, became very evident in the nervous fever at Berlin in 1813, as well as in the formidable epidemic described by Hufeland, which ensued after the war, and raged in the north of Germany, during that and the preceding year. Although but a few years before the strongest stimulants had been necessary to obviate the paralysis which supervened even in the beginning of the disease, yet an opposite practice was now required, and antiphlogistic remedies were alone found capable of preventing the vascular excitement from terminating in inflammation of either the head or chest. In short, the inflammatory *constitution* has been prevalent in Germany ever since the years 1810-11, sometimes in its pure and marked form, and sometimes complicated with gastric and rheumatic symptoms.

This *constitution* became general, at the very same period, in Great Britain. Dr. Clutterbuck, of London, had indeed ascribed the origin of fever to inflammation of the brain, so early as 1807, and about the same time Dr. Steiglitz, of Hanover, had recommended the antiphlogistic treatment of scarlet fever, in preference to the stimulating plan then in vogue. But as the inflammatory was

then still subordinate to the rheumatic and gastric constitutions, their opinions did not gain many converts. But the inflammatory constitution had increased so much in the autumn of 1809, and the winter of 1810, that even Dr. Bateman was obliged to prescribe venesection in fevers, a practice quite at variance with his former views. Erysipelatous inflammation became common in London, Aberdeen, and Leeds, and numerous cases of puerperal fever occurred in the latter towns, which, according to Gordon and Hey, never terminated favourably, except when bleeding and purgatives were employed with freedom. But it was not until 1813, when the inflammatory constitution had fully developed itself, and the bad consequences arising from violent determination of blood to the head in nervous fever could not be averted except by decisive measures, that venesection came into general use in Great Britain in consequence of a publication by Dr. Mills, who had prescribed it with much success since 1810. In the same year that truly estimable physician, Dr. Thompson, published his admirable work upon inflammation. Blackall recommended blood-letting in several species of dropsy, and Armstrong employed the same remedy, combined with large doses of calomel, in the inflammatory puerperal fever which was prevalent at Sunderland. Venesection became from this time as great a favourite as ever in England, not, however, to the exclusion of purgatives, which were indicated by the derangement of the stomach and bowels that accompanied the inflammatory constitution. Both these remedies were found extremely beneficial in the nervous fever which was epidemic in Ireland in 1813-14; its inflammatory character being clearly evinced by a hard and full pulse during its first stage, and a violent determination of blood to the head, by which the headach and raving were increased, while its gastric type was not less strongly marked by tenderness of the epigastrium, costiveness, or else frequent and unnatural alvine discharges, together with a loaded tongue and bilious vomiting. The latter symptoms were, in Dr. Grattan's opinion, of such importance, that he gave a decided preference to the purgative plan. The fever, which had previously been confined to Ireland, became generally diffused over the rest of Great Britain after the famine of 1816, and continued, without intermission for four years. Its inflammatory character being peculiarly favoured, both in England and Scotland, by the habits of the inhabitants and the situation of these countries, venesection attained an unexampled degree of celebrity, notwithstanding the representations of the Irish physicians, who used that remedy with more moderation. It was soon believed that there is, literally speaking, no disease whatever, in which the lancet ought not to be used, and as the human mind is ever prone to extremes, it was soon generally considered, both in England and Scotland, to be a well founded pathological

inference, "there is but one species of fever, viz. the inflammatory, and consequently venesection is the only true anti-febrile remedy. Such is the case in England at present, and it must have been so always, and in every part of the world." I flatter myself, however, that the preceding observations and statements of facts, drawn from authentic sources, sufficiently negative these assertions, and establish the real existence of a change in the constitution of diseases, notwithstanding what Dr. Duncan once said to me, "that such changes existed only in the imagination of physicians."

It is now, gentlemen, twelve years since Dr. Autenrieth, in his Account of the State of Medicine in Great Britain, made the foregoing interesting observations, and to me it appears that the history of the diseases which have since prevailed affords convincing proofs that the then *inflammatory constitution* has again subsided, and is now replaced by a typhous type; indeed it cannot be denied that a very great difference exists not only between the present and the former scarlatina, but also between the fever of the present day, and that which prevailed shortly before Dr. Autenrieth published. But, gentlemen, this is too important a question for us to decide without more reflection and thought than I have been able to bestow on it, and without more facts than I have been able to collect. The opinion I have brought forward I do not wish to be received as established; I look upon it as probably well founded, but as yet not proved, except so far as to merit further consideration and excite further discussion.

Indeed I have, for the present, been obliged, by the pressure of other engagements, to postpone a more accurate examination of this subject, and a more severe scrutiny of the facts which just now crowd into my memory, but I conclude with remarking that the wide spreading epidemic influenza which lately visited the whole of Europe, including the British Isles, was not only truly remarkable both for the violence of the feverish symptoms, and of the local congestions of the chest and heart which accompanied its attack, but likewise for the unexpected relation which it was found to bear to all measure of active depletion. I appeal to the profession for their testimony on this matter, I ask whether all our pre-conceived opinions as to the *à priori* indications for venesection, leeching, and purging, were not found to be contradicted by the effects of these remedies in the epidemic influenza of 1833. The sudden manner in which the disease came on, the great heat of skin, acceleration of the pulse, and the intolerable violence of the headach, together with the oppression of the chest, cough, and wheezing, all encouraged us to the employment of the most active modes of depletion, and yet the result was but little answerable to our expectations, for these means were found to induce an awful prostration of strength, with little or no alleviation of the

symptoms. In some who were thus treated recovery was protracted and doubtful, and the strength was not restored for several months. Indeed nothing was more curious than the length of time which was necessary for some persons in order to recruit their strength after an attack of this influenza, although that attack had not continued more than a few days, and had been judiciously treated, without blood-letting or unnecessarily debilitating remedies. I have known some who lapsed into a cachectic state of long continued debility from which they never recovered, for while thus reduced they fell victims to the first acute complaint which seized them. The influenza above referred to fully confirmed the opinion I had long entertained, that in acute diseases debility and exhaustion of the vital power are by no means in every case either caused by, or proportioned to, a state of previous excitement. This opinion received further support from the symptoms and phenomena exhibited by the Asiatic cholera, in which the stage of debility and collapse commenced and too often closed the scene. Why do I dwell, gentlemen, upon these occurrences, and why have I so frequently referred to the opinion above expressed? Simply because the prevalence of the contrary opinion laid the foundation for the injudicious and exclusive application of the lancet, and of the antiphlogistic method generally in Britain, and was, consequently, the cause of working excessive mischief. But I must have done, and must defer the special pathology of the scarlatina lately epidemic, to our next meeting.

LECTURES

ON

MIDWIFERY & THE DISEASES OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXVIII.

Puerperal Fever.

GENTLEMEN,—At my last lecture I described to you the symptoms of that species of puerperal fever which, during the last few years, has chiefly prevailed in this metropolis, or, at least, which has come most frequently under my own observation.

The appearances after death are very various; sometimes the intestines will be found glued together, or imbedded in an immense effusion of coagulable lymph; a large quantity of sero-purulent fluid will be found in the cavity of the peritoneum, the intestines distended with gas, and that part of the peritoneum which covers them and the uterus showing evident signs of inflammation. In other cases scarcely any of these changes will be

present by which we can account for the pain and rapid prostration of strength which had been observed during life; and it is to Dr. Robert Lee that we are chiefly indebted for some valuable additions to our knowledge on this subject. "The surface of the broad ligaments (says Dr. Lee) has been red and vascular, and partially and completely imbedded in lymph and pus; the loose extremities of the Fallopian tubes have been of a deep red colour, and softened; and deposits of pus in a diffused or circumscribed form have taken place in their cavities or sub-peritoneal tissues. Between the folds of the broad ligaments effusions of serous and purulent fluids have also been found. Numerous important changes have likewise been observed in the structure of the ovaria; their peritoneal surface has often been red, vascular, and imbedded in lymph, without any visible alteration of their parenchymatous structure; or their whole volume has been greatly enlarged, swollen, red, and pulpy. Blood has been effused into the vesicles of De Graaf, or around them, and circumscribed deposits of pus have been found dispersed throughout the substance of the enlarged ovaria. In several cases the entire structure of the ovaria has been reduced to a broken down vascular pulp, no traces of their natural organisation being left*."

An important fact has been observed by Dr. Lee, namely, that inflammation and formation of purulent matter in the uterine veins is a very constant attendant on puerperal fever, and the results of a very large number of morbid dissections have afforded him ample opportunities of ascertaining the frequency, I might almost say the uniformity, of its occurrence. The veins, more especially the spermatic vein, of the side to which the placenta had adhered, have been found filled with pus or a sanious purulent fluid, or impervious from false membranes or firm coagula of blood or lymph, their coats considerably thickened, and frequently of a dark red colour.

Dr. Lee considers that this state of phlebitis is produced by "the communication indirectly established between the venous system and atmospheric air from the separation of the placenta after delivery;" but in this respect I can by no means agree with him, and am inclined to follow most completely the opinions of the late Mr. C. White of Manchester, and Dr. Kirkland, not only from facts which I have had repeated opportunities of observing, but also from facts which Dr. Lee himself confirms.

"The most distinguishing and inseparable symptom of all others (says Mr. White) is the quickness of the pulse, whatever other quality be joined to it, which constantly occurs whenever this fever exists in any alarming degree, and from which the degree of danger may be estimated more certainly than from all the other symptoms put together. This immode-

rate quick pulse is not the constant attendant of inflammatory, putrid, nervous, or eruptive fevers, but every surgeon conversant with his business knows that it never fails to attend absorption of matter from abscesses or ulcers, whatever be the concomitant symptoms or the quality of the matter. The physician also knows it is constantly present in ulcers of the lungs and other internal parts of the body. In lumbar abscesses and those of larger joints it is no uncommon thing for the patient to remain in a state of perfect health till the abscess be opened either by art or nature, and the air gets admission; but in a few days after this pain, soreness, and tenderness of the neighbouring parts, or perhaps of the whole body, are perceived; a fever supervenes, sometimes preceded by cold shiverings, and succeeded by burning and sweating; at other times creeping on insensibly, but always accompanied with an immoderately quick pulse. A diarrhoea and pains in the abdomen frequently follow, and the progress of the disease is so rapid, that sometimes in ten or twelve days, notwithstanding the use of every remedy, death closes the scene."

"There are other causes (Dr. Kirkland observes) besides inflammation which bring on a puerperal fever; for it sometimes happens that coagulated blood lodges in the uterus after delivery, and putrefying from access of air forms a most active poison, is in part absorbed, and brings on a putrid fever. In this case, the discharge which should immediately follow delivery is not sufficiently large. Small clots of blood make part of the lochia, which are less in quantity than they ought to be, but the patient has no other sort of complaint for three or four days till the retained blood begins to putrefy. A fever then first makes its appearance, preceded by rigors, which are followed by a quick weak pulse, thirst, pain in the head, want of sleep, sighing, load at the præcordia, restlessness, great weakness, dejection of spirits, &c. Sometimes the patient has a difficulty of breathing with pain in the side; the skin is dry, and the tongue of a glossy brown colour, and also very dry. Sometimes the body swells during the course of the disease, but a soreness and a tenderness of it is a never-failing attendant soon after the fever begins."

"Absorption (says Mr. White) may in all cases be increased, and in some entirely caused, by such an unfavourable position as may occasion the matter to lodge in a wound, where, growing acrid, it will produce inflammation and fever by its irritation. By the application of a sponge, an incision in the most depending part, or mere alteration of position, these symptoms frequently soon disappear; the matter becomes more laudable, and is even diminished in quantity." Upon the same principle "the horizontal position to which women are so frequently confined after delivery greatly favours an absorption of the lochia."

* Med. Chirurg. Trans. vol xvi.

Struck with the peculiarity of these opinions, I have been careful to ascertain, in almost every case of puerperal fever of this form, whether the patient has risen or sat up in bed since her labour, or whether during the whole time she had remained in the horizontal position; and in by far the majority of cases to which I have been called on account of an attack of this affection, it has appeared that the patient had never risen from the horizontal posture, and in some cases had not even turned upon her side. Thus it can easily be imagined that no escape had been afforded to the lochia; but from the natural direction of the vagina, this canal, as well as the whole uterus, must have remained filled with a mucous sanious fluid, of itself highly prone to putrefaction, which must be greatly promoted by stagnating so many hours in the vagina, during which time it has been kept at a considerable degree of temperature from the warmth of the adjacent parts, and moreover exposed to the action of the external air. Guided by this view of the subject, I have always directed that the patient should frequently sit up for a few minutes at a time during the day, and to ensure this being done, I have expressly forbidden her to take her food or suckle her child in the supine posture, but to sit up in her bed, as Mr. White directs, with a shawl over her shoulders, and when necessitated to evacuate the bladder to do it kneeling. In repeated instances has a remarkable degree of relief followed this evacuation of the vagina and uterus of stagnant half-putrid lochia. The pulse has become fuller and less rapid, the uterus softer and less painful, and there has been a general remission of the symptoms which I could scarcely ascribe to any other cause than the removal of this source of irritation of the very worst kind. Dr. Kirkland expresses a similar opinion:—"I have observed (says he) if blood lodges and coagulates in the uterus it mostly happens when the placenta comes away before the uterus has had time to contract, which is another proof that we should not be over hasty in delivering it, for when the uterus is sufficiently closed the coagulated blood and placenta are both pressed out together. However, in moving the patient to her own bed, after she has recovered her spirits I always direct her assistants to raise her up a little, or, if she is able, that she should walk a few steps, as by thus stirring her about, whatever blood may have lodged is commonly discharged." One can scarcely advocate this latter mode of proceeding, but still it must be allowed that not only does the upright posture favour the escape of any coagula, &c., which may have lodged in the uterus, but the very exertion of rising from bed and walking a few steps must prove a powerful stimulus to the still further contraction of the uterus. "Nor do I approve (says Dr. Kirkland) of the practice of entirely suppressing after-pains, for, being kept within due bounds, they seem to me to be as necessary for the expulsion of the

after discharge as labour pains are for the delivery of the fœtus." This fact has been noticed so long ago as in 1751, by Burton, where he describes the action and nature of the after pains. "Upon the expulsion of the child and placenta, the orifices of the uterine sinuses must contract, and thus retain the grumous blood which is in them. Hence the use and benefit of these after pains, which by stimulating or compressing the vessels and muscular fibres make them exert their force to squeeze out this grumous blood, which otherwise might remain there and occasion inflammations, suppurations, &c. From all which we find that these after-pains are necessary towards the removing or preventing an inflammation of the womb; wherefore we must not be too forward in giving strong opiates and other internal medicines which may take them off whilst this grumous blood is lodged within these sinuses. *I doubt not but those patients who die from the eighth to the fourteenth day, whose uterus has been inflamed with the symptoms above mentioned, have been injured by the too free use of opiates.*"

Are we not then justified in considering that the use of after-pain draughts which is so generally and indiscriminately adopted in this country, must frequently act injuriously to the patient, in preventing that full contraction of uterus, which ensures the expulsion of all coagula, &c.? And do not the frequency and severity of after pains tend to prove that sufficient attention has not been paid to the important points mentioned by Dr. Kirkland, viz. of occasionally putting the patient into such a position as shall ensure the escape of any coagula or lochia which may have been retained? In some cases, especially from poverty or neglect, there has been great inattention to this circumstance, as also to the general cleanliness of the patient; I have found repeated injections of warm water into the vagina to have the happiest effects, removing the pain and irritation of the uterus, and bringing on a return of the lochial discharge, which at the beginning of the attack had been suppressed. Knowing how richly the uterus is supplied with veins and absorbents, and also from daily experience what a powerful effect the absorption of a small quantity of putrid matter by a wound during dissection has upon the system, and if we bear in mind the observations which I have now quoted from White and Kirkland, are we not fully justified in attributing a greater part of the symptoms in this form of puerperal fever to the action of putrid matter absorbed into the system?

The observations respecting the treatment of this affection which Dr. Gooch has given in his "Account of some of the more Important Diseases peculiar to Women," are very valuable, and his remarks on the propriety of bleeding, tend, I think, to confirm the opinion which I have just stated. "There is a class of cases (says Dr. Gooch) attended with pain and tenderness of the abdomen, with

a rapid pulse, which does *not* require bleeding, which does not bear it to the extent to which it is necessary in the inflammatory peritoneal fevers, and which is speedily and effectually cured by opiates internally, with hot poultices to the belly, and sometimes leeches. There is reason to believe that this form of the disease is present when the patient in her ordinary health is delicate and nervous, when the pain and tenderness have followed any irritating cause, such as severe after pains or a griping purge; when the pulse, although quick, is perfectly soft and weak; and this opinion is strengthened if blood has been drawn without relief, and without any signs of inflammation on its surface. The best mode of treating this case is to wash out the large bowels by a very large glyster, to give ten grains of compound powder of ipecacuanha every three hours till the pain is gone; to keep the abdomen constantly covered with a warm linseed meal poultice; and after the pain has ceased, if the abdomen continues sore, and the pulse quick, to apply leeches and give a mild purge. When I doubt the nature of the case (says Dr. G.) I apply leeches at the beginning."

This is evidently a milder form of the disease which I have been just describing to you, and the fact which Dr. Gooch has pointed out as to the character of the pulse is very important as an indication for the employment of bleeding; but I cannot help thinking that to ascertain the character of the pain is equally important. "A tenderness, soreness, and pain of the abdomen," says Dr. Kirkland, "are not sufficient to alarm us, unless attended with a quick pulse and a fever, for it is well known that after long and hard labours, women often complain of the whole abdomen being so very sore that they can scarce turn themselves in their beds; yet if no fever appears, the patient recovers without inconvenience. Nor are flaccid breasts and non-appearance of milk any bad symptoms, if a fever be absent, as this may arise from a large discharge at the time of delivery, and a variety of other causes, which nature safely gets over in time. On the contrary, when I find a quick pulse and febrile heat, accompanying an inactivity in the breasts at the time the milk should come, or even a quick pulse, with pain resembling after-pains, I am always apprehensive of danger, however favourable other symptoms may appear." The uterus may be hard, swollen, and painful upon pressure, and yet there is not actual inflammation. I will not deny but that inflammation will quickly follow, if nothing be done to remove this state of irritation. The pulse is quick but seldom hard; and even if it be at all sharp, it produces but little resistance to the finger. In these cases we may bleed, but we seldom reduce the quickness of the pulse, although it sinks still further in point of strength. There is seldom much buffy coat upon the surface of the blood when drawn; and if the pain *be* relieved for a short time, it returns again as soon as the system has re-

covered from the immediate effects of the syncope. We do not see that striking relief follow a copious venesection in cases of this sort, which is so remarkable in inflammation of the abdominal viscera under other circumstances, and I am more than ever convinced, not only from the fact just mentioned, and from the results of my own experience, but also from the unfavourable results of the practice in which bleeding has been uniformly and largely employed, that it is *not* a remedy which is *always* to be premised before the employment of other treatment, as in cases of simple inflammation of the viscera or serous membranes. The only circumstances, I apprehend, under which venesection ought to be employed in this affection, are where the pain is constant without intermission, and where, besides its rapidity, the pulse betrays a degree of wiry resistance to the finger which can never be mistaken. In this case, the blood drawn will show all the usual marks of inflammation, and the relief procured will be proportionally great. On the other hand, where the pain, although severe, is not constant, but the patient experiences every now and then a slight abatement in its severity, or a short intermission altogether; where the pulse, although rapid, is soft, and resists the finger but feebly, we shall seldom produce any permanent relief by bleeding; the pulse becomes weaker, but its rapidity, so far from being diminished, is rather increased. The pain may be relieved for a short time, but it almost always returns as severely as it was before the venesection. Under these circumstances, the pure antiphlogistic treatment seems to have little or no controul, either in removing the pain or diminishing the pulse, or in preventing the disease running into that tympanic state of peritonitis which is so fatal in its effects, and we are not only losing time by employing an inefficacious mode of treatment, but are exhausting the powers of a system already more or less depressed. It would seem that by thus reducing the powers of the system, we diminish its capability of ridding itself by the natural outlets of the virus which has been carried into the circulation, nor do I see how this is to be assisted by bleeding. If a state of actual inflammation has been induced, bleeding of course must be used with the greatest promptness; but in employing this remedy in the above-mentioned form of puerperal fever, although we relieve the inflammation for a time, the cause is not removed. It still continues to act, and the symptoms return under much more formidable circumstances, from the increased debility of the system confining our means of treatment within still narrower limits.

That the discharges, or coagula, &c., becoming putrid in the uterus or vagina is capable of bringing on fever, is no newly observed fact. Puzos remarks, that in abortion, where the fetus has escaped, and the secundines have remained, and the discharge become foetid, he

has seen the patients subject to irregular attacks of fever. "Twice I have had occasion to see (says Van Swieten) an acute, continued, and putrid fever follow in consequence of grumous concremented blood remaining in the uterus after a three months' abortion; one of these died on the 4th, the other on the 17th day, of the distemper."

Acute peritonitis does not necessarily terminate, or even accompany, this form of puerperal fever. The treatment, however unsuccessful in stopping the disease, has nevertheless generally gone so far as to check, or at least modify, any inflammatory symptoms which may have been present; and we occasionally see nature make extraordinary efforts to rid herself of the virus carried into the system. Enormous depôts of a puriform fluid are sometimes formed between the muscles, especially of the extremities in the vicinity of, and sometimes actually in, the larger joints; the cellular tissue entirely broken down, with all the sloughy appearances of diffuse cellular inflammation; the neighbouring muscles softened, and of the colour of boiled meat. In some few instances, violent inflammation of the eye has come on, terminating in rupture of the cornea and destruction of the organ, a circumstance which I have also observed in a case of retained placenta, where a portion of it had remained attached to the uterus*.

"All these affections," says Dr. R. Lee, in his valuable article upon puerperal fever, in the Cyclopædia of Practical Medicine, and which I recommend to your perusal, "appear to have a common origin, and cannot be referred to any other cause than to the morbid condition of the veins of the uterus. The purulent, or other secretions formed by inflammation within the cavities of these vessels, probably produce the whole of the injurious effects now described, by entering the system, and contaminating the mass of blood, in like manner as poisons do when absorbed into the body." Thus then, gentlemen, we see that it is allowed by one of the chief authorities of the present day upon this subject, that in uterine phlebitis the disease appears to depend upon a contaminated state of the circulating fluid; and from the authorities and facts which I have previously quoted, I think we may safely conclude that, in the majority of cases, these effects are not so much owing to the formation of purulent fluid in the uterine veins, as to the absorption, in the first instance, of putrid matter lodging in the cavity of the uterus, the inflammation and formation of purulent fluid in these veins being, in common with the other symptoms, a result of this. The late researches of my friend Dr. Stevens on the blood tend strikingly to confirm these views. "In many of the most fatal cases of malignant fever," says he, "there is no excitement sufficient either to produce inflammation

or to injure the solids. There is functional disease and want of secretion produced by the vitiated and vapid state of the blood. In some cases there is a diminution, rather than an increase of action, even in the first stage, and often there is not one symptom of inflammation during the fatal progress of the disease, or one inflammatory spot to be seen after death to mark its existence, or to induce us to believe that anything but functional disease had ever existed in any of the solids; yet these are the very cases of all others which are most fatal."

According, then, to the views which I have taken of this affection, the indications for treating it will be the following:—*first*, to subdue any inflammatory symptoms, if they be present; but it must be remembered, that we have no positive proof of the existence of inflammation merely from the presence of pain and a rapid pulse, although these two denote a state of irritation advancing with rapid strides into actual inflammation. The character of each must be carefully ascertained before we are justified in deciding upon the necessity of bleeding. As this operation is generally performed in the erect posture, to favour a state of syncope, we are following a *second* indication at the same moment, and, perhaps, one of the most important, viz. placing the patient in such a posture as will promote the escape of any coagula, which might have been stagnating in the uterus or vagina. We thus remove one great exciting cause of the disease. Our *third* indication is to increase the action of all the excretory functions, and thus remove as far as possible the virus which may have already entered the system. There is no remedy which I know of that has such a power in producing a general erethism throughout the whole excretory system as calomel, in large doses. The secretions of the liver, the mucous membrane of the intestinal canal, of the skin, and kidneys, are all very remarkably increased by the action of a large dose of this medicine, and I cannot help attributing the return of healthy lochia, which so frequently follows a dose of this sort, to a similar action exerted on the vessels of the uterus and vagina. No effort of nature can be so well directed for the removal of any noxious principle from the circulating fluids, as a general increased action of the excretory system; and I have seldom or never seen calomel act with such success in this form of puerperal fever, except where it had been given in a sufficient dose to produce this effect. Dr. Gooch, in the work above alluded to, has pointed out the advantages of this manner of exhibiting, but I cannot agree with him where in another part of his work he recommends it should be given in small and repeated doses, because this mode of its exhibition is far inferior to the other, both in the rapidity and efficacy of its action. Salivation is by no means a necessary object, nor have I ever

* *Medical Gazette*, Jan. 10, 1829.

seen it produced, even by a scruple dose of calomel. In one case where three doses of ten grains were given at the interval of twelve hours between each, it had merely the effect of keeping up the excretions in the manner I have already stated, and with ultimate success, although under unusually unfavourable circumstances. It is, however, seldom necessary to exceed ten grains at a time, as this is generally sufficient to attain our object. It should always be combined with some other medicine, more especially one that will assist its diaphoretic action. For this purpose, in cases where the pain is constant, without any remission, showing that a state of inflammation has been already induced, it will be advisable to combine it with a little of James's, or antimonial powder. Where, on the other hand, the patient experiences evident abatement, or even remissions of pain, ten grains of calomel, with an equal quantity of Dover's powder made up into pills, will be preferable: the opium acts by relieving the pain, and contributing to induce a copious perspiration. To assist this, and also to relieve pain still more, a large poultice, made with linseed meal and boiling water, spread thin and folded up in a cloth, so that a single layer only of the linen shall be between the poultice and the patient's skin, should be laid over the whole abdomen as hot as it can be borne. If well made, it will retain its heat for five, six, or even more hours, and yet is neither so heavy as to produce uneasiness to the patient, or to prevent sleep. Some hours afterwards (or the next morning, if the calomel has been given late at night) a saline draught, especially if the bowels have not been much acted upon, and appear to be still loaded, should be given, and if there be any return of pain, now and then a little liq. opii sedativus may be added with great advantage. The saline I usually prefer is a combination of sulph. and carb. of magnesia in aq. menth. pip., with a little liq. antim. tart. to keep up the action upon the skin; for, in large doses, calomel seldom acts as an active purgative; four or five copious feculent and bilious evacuations is the usual effect, and very often not so much. The vagina should be repeatedly washed out with injections of warm water, and if the tenderness of the uterus still remain in any degree, the poultice should be repeated. The patient should suckle her child sitting up, if possible, and a liberal supply of gruel, arrow-root, &c. should be administered. The general result of this treatment is, that in twelve or eighteen hours the uterus loses its tenderness and hardness, the pulse becomes fuller and softer, the tongue cleaner and more moist, the kidneys and bowels have acted copiously, and the lochia and milk have returned.

On looking over many of the cases of puerperal fever which have been published, many were evidently of this form of the disease, viz., where the abdominal parietes at first were not tender, but the uterus hard, swollen, and

very painful, the pulse quick and small. The disease does not appear to have been arrested at all in its progress; the pain for a time has been relieved by the employment of venesection; but the advance of the tympanitis and other symptoms has not been retarded. The pulse has increased in rapidity and feebleness, nor has any alleviation followed the repeated doses of calomel and opium; and the dissection has shown immense effusions of lymph, &c., and some or all those changes which have been enumerated as occurring in the veins of the uterus and adjacent parts.

I have thus, gentlemen, laid before you my own views respecting the nature and treatment of this species of puerperal fever; but I must again request you to bear in mind, that what I have said applies to *this* and not to *every* form of the disease. Puerperal fever, at different times and places, has assumed the characters of a malignant epidemic of the worst kind, defying every mode of practice, and carrying off nearly every patient it attacked. The contagious nature of this aggravated form has been a question of considerable doubt, but certainly some very remarkable facts have been observed in this country in favour of it. On the other hand, the testimony of the French accoucheurs is strongly against such being the case. Which view, then, are we to adopt? I should say *both*, according to circumstances; that, generally speaking, where due attention has been paid to cleanliness, ventilation, &c., the disease does *not* attain that peculiarly virulent form which becomes contagious; but, as is the case with cholera, and different forms of fever, where circumstances have conspired to aggravate its fatal character, it is capable of assuming such a degree of intensity as to become communicable to other puerperal women*.

* During a severe and recent epidemic which has occurred since the delivery of these lectures, and which was of a different form to that now described, I have not found it necessary to alter these views materially. Whether the vitiated condition of the blood *always* results from the absorption of putrid matter in the uterus and vagina is difficult to prove. I should say not, where the disease has not commenced with pain, hardness, and swelling of the uterus. The fluid, claret appearance of the blood after death has shown its diseased state; and I have had an opportunity of verifying the experiments of my friend Mr. Prout respecting the efficacy of alkaline carbonates in the disease. In one case where a deposit of pus was already beginning to form in the supinators of the right arm, the sodæ carb. and afterwards Dr. Stevens's saline mixture, had a decidedly beneficial effect; I must not forget to mention, however, that these remedies had been preceded by a 10 gr. dose of calomel.—E. R.

Reviews.

The Dublin Journal of Medical and Chemical Sciences, including the Latest Discoveries in Medicine, &c. No. XXI.

We always feel a gratification on receiving any of the periodicals of the day; they are chroniclers of things that be, they impress events as early as they occur, and in a short space of time afford a man of ability the opportunity of becoming known to the world, when he usually meets with his due reward. We have often thought that it would be an interesting inquiry to contrast the contents of the medical periodicals of the last twenty years with the various works on medicine that have appeared during the same period, under the titles of "Systems," "Elements," "Monographs," &c. It would be unfair to arrive at a verdict before examining the witnesses, but we very much suspect that the latter works contain little matter of value that is not to be found in the former. We mean not to say that the latter do not often embody new ideas, yet they are often fleeting, hypothetical, and often absurd, and frequently of little value. One man tells us, for example, that the majority of ulcerous legs can be cured with bandages and a preparation consisting of common ointment with chalk.

In the classification of mankind, it has been usual to place authors among the *genus irritabile*, and, dealing as reviewers with such solely, it cannot be a matter of surprise that in the faithful discharge of our duty we should sometimes displease. In the last number of a contemporary journal, there appears a somewhat rabid reclamation from a Mr. Spender, in reference to a notice we made of his work on ulcers, in No. 160 of our journal, in which we are most uncourteously charged with "*absurdity*," and other terms equally characteristic of the *irritabile*. Now we have but a very concise reply to make to this charge (for neither the author nor his book is deserving more) of Mr. Spender's, and that is, to submit to our readers one passage only from this person's work, and then ask to whom best applies the charge of *absurdity*. The passage is the following (three pounds of chalk to two pounds of lard in ulcers):—"The mildness of this application is probably owing to the large quantity of *alkali* which is ready to unite with the *acid* generated by the animal matter, on the presence of which *rancidity* appears to depend, and thus the lard is prevented from running into this state."—P. 66.

Does this sapient son of Æsculapius then call chalk an *alkali*? Again, is not the acid he speaks of a most gratuitous assumption, unconfirmed by chemical analysis, and generally absent? Had Mr. Spender done to others as he wishes to be done by, he would not have committed to paper the following dis-

graceful and, we believe, false statement from some conceited young man.

"I trust it will not be imputed to any unworthy motive, if I quote, in confirmation of this statement, an extract from a letter, written by an observant young man, who has lately left me to attend the hospitals in London:—'I took the opportunity of being present the other day, when —, one of the surgeons, was prescribing for the out-patients, and, as is always the case, there happened to be plenty of ulcerated legs. Among the rest, a poor woman unrolled a large poultice from a varicose ulcer, which, by the by, I would have cured in a month. —'s remarks were much as follow:—'Gentlemen, this ulcer is plainly produced from a varicose state of the veins; now nothing will do in these tedious cases but rest—rest, gentlemen, is the grand desideratum.' The woman's reply was, that she could not possibly afford to lie in bed, as she had a family to support. Then — told her, 'your leg will never get well, but you shall try some fresh application.' He accordingly prescribed the black wash, which he appears to make use of in all those cases which are not poulticed. I am afraid —'s treatment is too general.'"

If such be the arguments by which the author attempts to overturn and decry all preceding and existing practice in treating ulcers, our readers will ask, what reliance can be placed in his other statements?

The above absurd statement ought to call down upon him the full and unqualified censure of his professional brethren, if he were really deserving of such a notice. We tell him again, that his "*panacea*" (or a similar one) has been tried by others, and like other "*panacea*" has frequently failed. When he tells us that every kind, and form, and extent of ulcer can be healed without the patient being subjected to rest, we would not imitate him in the employment of uncourteous phraseology, and state we believe he has told a falsehood, or that it is an "*absurdity*," no; but make the simple avowal that such practice does not succeed in London, it may, nevertheless, in Bath. The following was written, we presume, for the Bathites.

"The necessity and advantage of compression in the treatment of the varicose sores being so great, the rapidity and completeness of the cure will very much depend on the manner in which it is employed. *Except it be properly used*, any surgeon who may feel disposed to give the method I am recommending a trial, will probably be disappointed in its result—but then the failure should be fastened neither on me nor on the plan, but ought to be imputed to the incomplete mode in which the attempt has been made."

We have done. We shall not do him further honour, but recommend his reperusal of our original notice, where he will find that

his book was treated with as much tenderness as its frail materials would admit, without undergoing irreparable destruction. We ought to apologise for this digression.

MR. WOODWARD has cured a case of TETANUS, caused by "taking cold," or a sprain of the back, or conjointly, after using the ordinary measures, by antim. tart., given in grain doses every hour, subsequently administering a turpentine enema every evening, a little blue pill, tinct. hyoscyam., and a blister over the sternum. He concludes, p. 411,—

"As I have not since had an opportunity of giving tartarised antimony in tetanus, I will make no observation on its use, except that it evidently diminished the muscular rigidity, lowered the pulse, and caused the bowels to be acted on by the enema, which, before its administration, had had no effect; to it, therefore, although I employed other means, I attribute the recovery of this case."

As an interesting record in medical literature, we cannot avoid extracting, for the notice of our readers, the case of Extra-Uterine Fœtation, by Dr. Macartney.

"Ellen Roche, Cranmore, two miles from Newtownbarry, æt. 40, brown hair, fair complexion, has had four living children, and aborted a fifth. States, that about nine months ago, being within a few days of her full time of a sixth child, she received a kick from a cow in the abdomen while in the act of milking her, in consequence of which she was knocked down and rendered insensible. In this state she was found by her family, and carried into the house. After being laid on a bed, and recovering a little, she complained of intense pain in the region of the uterus, followed by sickness of stomach and frequent vomiting of matter, resembling in colour the grounds of coffee. With little abatement of her symptoms she continued for some hours, when she was visited by the surgeon of a neighbouring dispensary, who took a large quantity of blood from her arm, and prescribed some medicines, with a view of allaying the irritation of the stomach. By this treatment she experienced considerable relief; the pain in the lower part of the belly, and sense of bearing down, continued until the evening of the fifth day, when she was attacked with all the feelings and symptoms characteristic of her former labours.

"After continuing without intermission for eight hours, and when expecting every moment to be delivered, the uterine pains suddenly ceased, and did not return again. On the following day the mammæ were fully distended with milk, and that secretion presented itself quite as copiously as on previous occasions. From all the symptoms of parturition she became quite free in the course of a few days. There were no after-pains, neither was there any discharge of blood or liquor amnii per vaginam. The only unpleasant sensation

experienced was that expressed by herself, of 'a dead, heavy load,' and bearing down at times much increased when in the erect position. After the expiration of some weeks from this period she began to feel the body and limbs of the child through the parietes of the abdomen, and at the time she consulted me they were still more evident to the touch. By placing her in a recumbent position, we could readily bring a portion of the fœtus to be distinctly felt by the hand. A leg, arm, and the face, were alternately presented for examination, and we could with the utmost facility delineate the knee, ankle, and toes of the first; the elbow, hand, and fingers of the second, and the forehead, mouth, and chin of the last, were as clearly perceptible as if handled through a couple of folds of linen. It seemed to require considerable exertion on the part of the poor woman to effect this object, as she complained of much weariness and lassitude afterwards. From repeated examination I was convinced that the abdominal parietes to the normal extent of integument, fasciæ, muscles, and adipose tissue, did not exist between the fœtus and my hand. At the present time she appears to be in excellent health and spirits, and pursues the usual avocations of a farmer's wife, without suffering any serious inconvenience. Her general health and appetite are also good; bowels regular; micturition unimpeded. The catamenia returned in about six weeks after the accident, and have always since been present at the accustomed period, and in the usual quantity. She has not had any soreness or tenderness on pressure of the abdomen for the last seven months. On being questioned, she replied with honesty, that she had renewed the connubial intercourse with her husband shortly after the return of the catamenia, and persisted in it undeterred by the probability of impregnation or its consequences."

Not doubting but that if the same investigation of cases simulated by the symptoms were made many would be found, we are anxious to obtain a record of any and all cases of this kind, recorded or unrecorded, and our readers would oblige us by doing so.

Dr. Breen's Essay is an interesting one, more so than perhaps a useful one, further than as being a means of directing the attention of the accoucheur to one of the earliest instruments we have recorded in midwifery, invented by the Chamberlens, viz. the vectis. He traces its history through the names of some of the greatest accoucheurs up to the present period. The author has "been in the habit of using the obstetric extractor for twenty-nine years, not as a lever of the first class, but as an extractor in the way mentioned by Dease." Lauder's lever is the one he uses.

"To justify the use of the obstetric extractor, it is necessary that the pelvis be not materially deformed, that the os uteri be fully dilated, or very nearly so, and that the os externum be in

a yielding state. I have proved in a former dissertation, that unless accidental occurrences, such as rupture of the uterus, puerperal convulsions, hæmorrhage, or other rare contingencies take place, we may wait with safety thirty hours for the condition of the parts above described, and use appropriate means during the interval to promote such a condition. I would here observe, that though the safety of delaying instrumental aid for thirty hours be proved as a general proposition, it by no means follows that the obstetrician should always put off affording extraordinary aid for that period."

Dr. Breen believes in the capability of rectifying the position of the head when in the cavity of the pelvis; but we are of opinion that to effect this, even with a considerable degree of force (and we speak from observation, and as attested by the experience of men of science and great experience), there are required one of two important conditions to exist,—either that the capacity of the pelvis shall be abnormally large, or that the head of the fœtus shall be under the average diameter. He who has frequently felt the fœtal head resting on the perinæum in a tedious labour stationary for hours, and who has endeavoured to alter its position, imagining some malposition to exist, can amply attest the difficulty, we might affirm the absolute impossibility, of raising it or carrying it in any direction by all the force the finger is capable of exerting. We strongly suspect that, in the cases of malposition of the head under notice, the rectification has been accomplished by the efforts of nature, or, perhaps, to place ourselves in a medium situation, that the finger, placed upon a part of the cranium, such as upon the temple or the external orbital processes of the forehead, and bearing with the chief weight of the body, the descent of that part being thus precluded, and with the opposed pressure from above, a revolving motion of the head might take place, it would ride in a direction intermediate of the two opposing forces.

Dr. Breen, we fear, is too sanguine in the facility with which the vectis can be employed successfully; in the hands of a scientific and able practitioner it may be readily accomplished, but we should be sorry in recommending the vectis in common hands. Men without a knowledge of the anatomy of the pelvic viscera, ignorant *in toto* of the agencies by which the fœtus is expelled *ab utero*, have used the good old instrument, the *forceps*, in too many cases, have been highly successful; but the vectis in such hands, and such hands there are we know in England, might, nay, we may say would, often commit irreparable injury to mother and child.

The vectis we are convinced may rectify errors of position of the fœtal head, but as a tractor we question its power or its applicability.

Nevertheless, Dr. Breen has discussed his subject in a fair, and at all times in a scientific

manner; it does credit to the goodness of his understanding; to his contemporaries he awards full credit; to his predecessors he is mild in advancing opposite opinions. The accoucheur will peruse the article, as we have done, with great pleasure.

An Essay on Artificial Teeth, Obturators, and Palates, with the Principles for their Construction and Application, illustrated by twenty-six Cases and twenty-one Plates.
By LEONARD KOECKER, Surgeon-Dentist, &c. &c. London: S. Highley.

We are always sorry, in commenting upon the production of an author, to employ terms anything savouring of acerbity; but whenever we do so, our readers, we are convinced, will attribute such conduct to the best of motives, namely, that of honesty.

In our notice of books in this Journal we have but one object in view,—that of expressing to the friends who support us our individual opinion on the merits or demerits of the books which are sent for our notice. In doing so party feeling we anxiously endeavour to avoid; merit we are ever wishful to support; ignorance and presumption always receive from us their due reward. The author of the present work has treated his subject in a very scientific manner; he has explained the method of adjusting artificial teeth, of improving defective palates, and has presented to us twenty-six well marked cases, with wood-cuts, illustrative of his principles and his practice.

Mr. Koecker, though practising as a surgeon-dentist, has received a regular medical and surgical education; and if we add that he is a member of some learned societies and an author of some creditable works—one on the "Principles of Dental Surgery," and an essay on the "Diseases of the Jaw,"—any production of his deserves from us some attention. The cases which fill the book are those of ladies of great beauty, with large fortunes and of about 22, of admirals, and hon. captains. "*Raræ aves in terrâ.*"

The practice of the author seems to be very judicious. The numerous wood-cuts, representing the forms of the artificial teeth with the mechanical apparatus are well executed, and perhaps we cannot do better than give one case as a fair exemplification of the character of the author's patients, of the great benefit that dentists confer upon the human species, and of the manner in which he treats his subject.

"Miss —, of —, about twenty-eight years of age, although originally of very good constitution, was reduced to so precarious a state of health, that she had not left the house for two years. Repeated pulmonary affections, sometimes accompanied by dyspepsia and fever, and all those painful and distressing symptoms which generally accompany the highest degree of nervous irritability, had

gradually so debilitated her constitution, that her medical attendants had considered her to be falling into a decline; the patient as well as her friends had, for some time, despaired of any permanent recovery, and were endeavouring to reconcile themselves to the most painful result, a termination which they considered to be at no great distance.

“To this view, however, one of her physicians decidedly objected, for, being a staunch adherent to my theory of the great influence of diseased teeth upon the constitution, he suspected that her general health might be greatly suffering from the diseased state of her mouth, and that, by a proper treatment of these local diseases, great progress would be obtained towards her constitutional recovery; he therefore requested that I should be consulted.

“I visited the patient at her own house, in company with her physician, and I was happy to corroborate the opinion of that gentleman. The lady had suffered principally from the irritation produced by the violent and unskilful insertion of seven artificial teeth with pivots upon the roots of the four upper incisors, two cuspid and one bicuspid teeth, and was still labouring under the injurious consequences of the operation, as well as the irritation produced by the dead roots and artificial teeth. I proposed, as the most important remedy, the removal of all the fangs on which the artificial teeth were fastened, as well as a few more diseased teeth and stumps, which had also been very improperly permitted to remain.

“January 20th, 1828, a few days after my first visit, the lady gladly acceded to my proposition, and nine carious teeth and roots were immediately removed.

“February 29th.—Visiting the lady again at her own house, I found her general health greatly improved, and her mouth in a sufficiently healthy state for the scaling of her remaining teeth.

“March 21st.—The health of the patient had now so much improved that she was able to ride a considerable distance to town, and submit to some further operations for the preservation of her remaining teeth.

“April 12th.—Some of her teeth were rendered sound by filing and stopping some carious places with gold.

“April 26th.—One tooth was rendered sound by stopping a carious cavity with gold. Her whole mouth was now in a perfectly healthy state, and the impression for a set of artificial teeth was taken at the same time. Her general health was much more improved.

“May 15th.—The patient was provided with a whole set of artificial teeth, which restored her powers of mastication, and her original healthy and beautiful appearance. The lady has since uninterruptedly enjoyed very good health, has married, and become the mother of beautiful and healthy children.”

To the dentist this work will be a great acquisition

Observations on the Climate, Soil, and Productions of British Guiana, and on the Advantages of Emigration to, and Colonising the Interior of, that Country; together with Incidental Remarks on the Diseases, their Treatment, and Prevention. Founded on a long experience within the Tropics.

By JOHN HANCOCK, M.D., &c., &c., &c.
London: Fraser. 1835. Pp. 89.

The pamphlet now before us contains a great deal of valuable information concerning a tract of country but little known to the inhabitants of this part of the world; to the trading companies, the merchants of the metropolis, and the members of the senate, we recommend it as furnishing many useful hints respecting colonisation; to emigrants, again, it will prove a book of interest, inasmuch as it points out to them a land of milk and honey, in a great measure free from the inconveniences attending emigration to other parts. Australia offers an almost insuperable objection in its distance, and the association of ideas with respect to convicts cannot fail to excite unpleasant feelings. Canada, again, is subject to great variations of temperature, the cold being there, not unfrequently, most intense for several months. From these sources of objection Guiana is free; it may be reached in one-fifth the time occupied in the voyage to Australia, and its climate is considered equable and temperate.

This matter, however, is rather foreign to our pages, still as emigration is, to a certain extent, a medico-political question, we have deemed it our duty to allude to it. Dr. Hancock has ample right to discuss the subject he treats of in his present essay, as he has had the benefit of four-and-twenty years' experience in Guiana.

The pamphlet may be fairly divided into several sections; of these those only are likely to interest our readers which treat on geology, natural history, and the diseases of British Guiana. To these, then, we shall, in a great measure, confine ourselves.

“Guiana presents a great diversity of soil, but the following are the principal:—1st, the clayey or alluvial marshy land of the coast, which extends usually some six or eight miles aback from the sea; 2ndly, the hills of sand and gravel, with some intervening morasses, extending to the falls; and, 3rdly, the deep soil of the interior. Below the falls, indeed, there are many fertile spots, but these are of limited extent.” “The mountainous country presents to view divers coloured ochres, indurated clays, and volcanic products, which repose on the granite, with various mixtures of loamy earth and vegetable mould to a vast extent. Beyond this, we meet with extensive savannahs or prairies, chiefly clayey and gravelly, affording pasture for cattle.

“The Mackerapan (about 5000 feet above the level of the sea, and 4000 feet above the plain on which it stands) is steep and pre-

epituous on the south, facing the savannah, but may be ascended with ease on the east from the river side. This situation would afford a most salutary spot for invalids, or convalescents who have suffered from liver complaints, fluxes, and the miasmatic fevers of the coast."

We are furnished with the following quotation from Mr. Hilhouse's "Indian Notices," relative to the geology of part of this district.

"As we approach the high sand hills of the interior, the natural drainage is so perfect, and the torrent of fresh water supplied by the cracks forms so strong a current that all impurities are quickly drained from the valleys, and the surplus water is instantly absorbed by the sands. Behind the pegass lands (near the coast) come high ridges of sand, interspersed with valleys, in which is a slight admixture of clay. These sand-reefs present many fertile spots.

"To the south of this belt the rocky region commences, consisting of elevated ridges and detached conical hills, resting on bases of sand, stone, granite, and siliceous crystals, containing a great variety of ochres, iron ores, mica, crystals, indications of the precious metals, &c." He adds in another page, still quoting from Mr. Hilhouse,

"Upon the whole there is no doubt that if the hand of cultivation reached to the hills of the interior, and a few artificial improvements were added to the advantages of local situation, the climate of the Indians would be the most healthy and agreeable of any within the tropics, with fish, flesh, fowl, and vegetables in abundance, pure water, no fever, and no musquitoes."

Mr. Hilhouse does not appear at all inclined to recommend members of the medical profession to settle in this earthly Paradise, for he says, "the banks of the rivers are so proverbially healthy, that were the population ten times more numerous than it is, there would be little employment for a physician."

Dr. Hancock pursues the geological part of his essay as follows:—

"On proceeding up the Essequibo, we meet with three great chains of cataracts or rapids, the first chain commences at Aretaka (20 leagues from the mouth of the river). The bed of the river, in the dry season, discovers vast quantities of vitrified, stony, and various mineral substances, and appears to have been the seat of volcanic fires at remote periods of time. These volcanic products are chiefly met with among the falls, incumbent on beds of granite, where the soil and lighter materials have been washed away. The principal component parts of the interior mountains are granite and its various modifications, which show them to be of primitive formation, whilst the extensive ranges towards the coast are of a less elevation, and are chiefly composed of indurated clays with sand and gravel, and may hence be regarded as belonging to the secondary order.

"The soil of the interior and mountainous parts of Guiana consists of a strong and fertile

loam, being a due mixture of clay, sand, and vegetable mould, with little calcareous earth; it contains much ferruginous matter, which gives it a yellow or reddish tinge; and, contrary to what has been asserted of countries within the torrid zone, there are evidently vast quantities of iron ore amongst the mountains of Guiana."

In a preceding paragraph, allusion is made to *pegass* lands, a term which we fear would be unintelligible to our readers without explanation. *Pegass* is a black, carbonaceous, vegetable matter, which constitutes the soil of the swamps, and which, towards the Pomeroon and behind the estates, is found to be six or eight feet deep.

Our author mentions an extraordinary fish frequenting the falls of the Essequibo, having teeth formed like those of a sheep, and which feeds entirely on grass and vegetables. He adds in a note that the morocoto, cartabac, and some others of a similar structure, also feed on divers plants, fruits, nuts, &c., which they crush with their strong molar teeth. He promises us a monograph on this subject, which will doubtless be read with great attention and interest, and as such is his intention we shall omit the observations we intended to make on the natural history of Guiana.

In the present article we shall not notice the cursory remarks of our author on the medicinal agents indigenous to Guiana, as he promises a monograph on that subject also, when we shall have a better opportunity of investigating the subject. We shall only say that there is no one better qualified than Dr. Hancock, from his long experience, to furnish us with information relative to the value and importance of the medical vegetable kingdom of Guiana.

The essayist gives it as his opinion that the climate of Guiana is not only prophylactic in cases of phthisis, but likewise proves of advantage when the disease has already shown itself. In scrofula, also, he thinks it would be of service. Yellow fever, he remarks, has long since abandoned the coast, while, according to his testimony, the whole country may be looked upon as healthy.

"In the interior parts of Guiana the purity of the air is such that in the dry season the stars appear like brilliants in the deep azure sky at night, and we not unfrequently perceive planets in the daytime. I have often observed the planets Jupiter and Venus when the sun was twenty or thirty degrees above the horizon, in which case Venus appears through a telescope precisely like the moon in her first quarter. At the same time, the splendour of the moon and zodiacal light contribute to make the nights most pleasing, and to throw a charm on every object."

In the treatment of the fevers of tropical climates, which Mr. Hancock seems inclined to consider confined to the West India Islands, or at least as not extending to Guiana, he recommends the use of vapour-baths, fomentations, warm sudorific drinks, and enemata,

so as to induce diaphoresis as rapidly as possible, and thus cut short the disease. He decidedly condemns the ordinary plan of treatment by venesections, purgations, mercurials, &c.

The pamphlet which we have just noticed will, by the information it affords, amply repay the outlay and the time spent in its perusal.

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ABSTRACT OF THE EVIDENCE TAKEN
BEFORE THE PARLIAMENTARY
COMMITTEE IN 1834.

Evidence of Mr. WILLIAM CLIFT.

(Continued from page 688.)

AT the meeting of the trustees in the month of August following Sir Everard Home's confession, the circumstances connected with the loss of the Hunterian manuscripts, were reported to them by the Board of Curators. The trustees upon this wrote to Sir Everard, to request that he would send to them all such papers as remained in his possession relating to the collection; they also demanded an account of the papers destroyed. To this request Sir Everard returned answer that *he had destroyed them all*, and gave, as his reasons for so doing, "that, having used them for so many years for the purposes of the collection, as a winding up of his executorship he had, according to a promise he had made to Mr. HUNTER, destroyed them." This letter was so worded, that it might have been taken for granted that *all* the papers were destroyed. The letter, was, however, read to Mr. Clift by the trustees, and they were then informed by him (Mr. C.), that Sir Everard had said that he had *not* burned them *all*. The trustees, in consequence of this information, applied again to Sir E., *being convinced that he had told them an untruth*, and he (Sir E.) sent them SUCH MANUSCRIPTS AS HE PLEASED.

Q. "Do you conceive that if, according to Sir Everard's statement, Mr. Hunter had given him directions to destroy them, after they had been made available for the purposes of the collection, Sir Everard had complied with these directions by extracting from those papers all the valuable information they contained relating to the collection itself, and applying such information to describe and illustrate the preparations in the museum?"—A. "Certainly not." Q. "Therefore, according to his own statement, he had destroyed them before he had complied with the directions of the testator, *if, indeed, those directions were ever given?*"—A. "Certainly." Q. "Did Sir E. Home state *where* and *when* those directions were given by Mr. Hunter?"—A. "I do not think he ever mentioned to me *where* Mr. Hunter gave those directions; but I heard it stated, I do not know whether by himself or by whom, that it was *when Mr. Hunter was dying, which I knew could not be true.*" Q. "State why you knew it could not be true?"—A. "I had a conversation with Sir

Everard afterwards, in which I stated it could not be true that Mr. Hunter, when dying, gave any such directions, *because I was the last person in his family who saw him alive*, and I knew that Sir Everard was *not* present at his *death.*" It appears that this conversation took place at the College about five or six months after the first conversation on the road to Kew; it occurred in consequence of what had passed between Sir Everard and the trustees; no one was present when it took place, excepting Sir Everard and Mr. Clift; it was the last which took place between them after the destruction of the papers.

To the question—"Did Sir Everard Home say anything to you about the time and place when the directions were given to him by Mr. Hunter to destroy the manuscripts?" Mr. Clift answered, "'Yes, he said, at the time of Mr. Hunter's death, when he was dying; and I said 'that is impossible.'"
Q. "What was his remark upon that?"—A. "He made no answer."
Q. "Did he leave the impression with you that such a direction had been or that it had not been given?"—A. "If he had *sworn* it *I would not have believed it.*"

The curators having informed the trustees of this loss, and Mr. Clift having also informed them that there were certain papers still existing, according to Sir Everard's statement, the trustees made a second application to Sir Everard, and a very small parcel, in the first instance, was sent by him to the trustees. Those papers were put into the hands of Mr. Clift, to see how far they were applicable to the purposes of describing the collection. Some of those papers referred to others which Mr. Clift knew had existed, and those were but a very small proportion of those which he could perfectly recollect. After this, another application was made, and a much larger parcel extracted.

In answer to other questions, Mr. Clift informed the Committee that Mr. Hunter's illness hardly lasted a minute: he died of disease of the heart. He (Mr. C.) was employed by Sir Everard in making drawings for his papers in the Philosophical Transactions or other publications all his life, from the time he was first acquainted with him till the time of the unfortunate burning of the papers, or the unravelment of that catastrophe on the road to Kew; that incident put a period to their mutual friendship. Mr. Clift knew that Sir Everard used Mr. Hunter's manuscripts to form papers for the Philosophical Transactions, bearing Sir E.'s name, because he (Mr. C.) frequently transcribed parts of them for that purpose. Some of the drawings, the originals of which are at present in the collection, were copied. The examination goes on:—Q. "When Sir Everard Home made his first avowal of the destruction of the manuscripts, did he appear to have made it *involuntarily* or by mistake, or how did it happen?"—A. "I do not know; but it was, I believe, to see *how I should take it.*" Q. "Did he make this confession at a

time when he was much pressed by the curators to complete the descriptive catalogue?"—*A.* "There was a regular application to him on the subject every quarter." *Q.* "Was it necessary for him, therefore, either to show that he had proceeded in completing the detailed catalogue, or to give reasons for his not doing so, and restore the papers?"—*A.* "I said before, that those papers were destroyed *immediately after* his receiving the last proof sheet of his second volume. I was not aware, *till a considerable time afterwards*, that the title-page expressed what it did. It stated that those lectures were a *catalogue raisonnée* of Mr. Hunter's collection, which I had not the slightest conception of." (We should like to know, were it possible, whether, if Mr. Clift had shown no disgust and disapprobation at the history of the burning of the papers with which Sir Everard, their *safeguard*, treated him on their road to Kew, whether, we repeat, the above title-page would have appeared, or one stating that Sir Everard was himself the sole author; but let us proceed a little further.) *Q.* "Was any meeting held for censuring Sir E. Home, or for excluding him from the Council?"—*A.* "Not to the best of my knowledge." (In fact no vote of censure was passed upon him.) "He died a trustee of the museum; and, after his death, applications were made to his executors to inquire whether there were any remaining papers of Mr. Hunter's in their possession, and with success. Among the manuscripts thus recovered was the volume that was mentioned respecting vegetables, and there were some that possibly might be Sir Everard Home's, that threw light upon many of the preparations; *those* were duplicates of some of the papers of Mr. Hunter's."

It seems, however, that at the time of the last recovery of papers from Sir E. Home during his life time, he stated that those were all the papers he had remaining in his possession. The volume upon vegetables served to explain many of the vegetable preparations in a way that could not have been done without them. *Q.* "Is there any thing further relating to this *deplorable* transaction that you wish to state to the Committee?" *A.* "I do not recollect any thing further, nor do I recollect that any communication of our loss was made by the trustees to the Government. The destruction of the papers happened immediately previous to the death of Dr. Baillie; perhaps a month or two months previous. Dr. Baillie was so ill that it was impossible he could have interfered, even had he known of the circumstances. Dr. Baillie might be considered as not acting in the business, because Sir Everard very rarely communicated with him. Sir Everard was Mrs. Hunter's brother, and took all the active part. No announcement of the affair was made to Dr. Baillie." *Q.* "Has it not very greatly added to the time and labour required of the Conservator to describe the collection, the not having access to the manu-

scripts descriptive of the preparations?"—*A.* "Most undoubtedly it has, in a very material degree." *Q.* "Has it not made it extremely difficult to determine what the undescribed specimens are?"—*A.* "I felt that if I could have described the collection in Mr. Hunter's own words, the public would have been better pleased with it; and whether Mr. Hunter was right or wrong, I should have felt that I had done my duty in describing the collection in his own manner. It might have been altered or improved by any one who thought himself competent to do so, but without that assistance it altered the case entirely. We were then obliged to trust to our own resources and our own knowledge, instead of that of Mr. Hunter's." *Q.* "What proportion of the papers have you been instrumental in saving by means of taking extracts from them?"—*A.* "I hope nearly half." *Q.* "And they have been of great use in determining the nature of the preparations?"—*A.* "Certainly; they were their histories." *Q.* "Up to the time of the destruction of the manuscripts, on what terms of intimacy were you with Sir Everard?"—*A.* "I looked upon him as one of my oldest and best friends; to that hour we had never the slightest disagreement." *Q.* "After that period?"—*A.* "When I became acquainted with this unfortunate event, it put a stop to that intimacy which before existed. I had no other cause whatever of complaint against Sir Everard; he was always very kind to me; but I felt that it was a paramount duty that I owed to Mr. Hunter's memory, who had taken me from poverty and obscurity, and brought me up, or was endeavouring to do so, to do all I could to endeavour to restore that which was otherwise lost."

Here end our extracts from Mr. Clift's evidence, and our readers have before them the lamentable history of Mr. Hunter's manuscripts. The College of Surgeons have now the charge of his large anatomical and pathological museum, to which they have added very considerably since it came under their care. The old building in which it was deposited being found much too small, another of larger dimensions is completing, for the purpose of exhibiting to advantage this splendid proof of the industry and talents of the father of our present improved system of surgery. The loss of that portion of his papers which related to the preparations and arrangements of the collection will be severely felt, and probably many years must elapse before the chasm created by it in the descriptive department can be satisfactorily filled. We forbear offering any comments on the Vandal exploit of consigning to the flames so much original and useful information as Mr. Hunter's manuscripts, without doubt, contained, and leave it to our readers to form their own opinions on the affair, which, we have no doubt, will be just and retributive.

(To be continued.)

SPEAKING MACHINES, NO. II.

The Organs of Voice—The Nature of the Vowels—Experiments of Amman, Kratzenstein, Kemplen, Willis, and Wheatstone thereon.

(Continued from page 696.)

The scientific account of the subject, to which we now proceed, includes some account of the organs of speech, of the nature of the vowel and consonant sounds, of the means of imitating them mechanically, and of the combination of these methods in one machine, so that they may be employed in the pronunciation of syllables, words, and phrases.

The vocal organs consist of

§ The lungs, which, so far as the voice is concerned, may be regarded simply as a bellows.

§ The windpipe, a series of cartilaginous rings connected together by intervening membrane. It is supplied with muscles by which its length and diameter may be changed, and serves to convey air from the lungs to

§ The larynx, which consists essentially of two large cartilages that form the outer framework of the organ, and are capable of a limited motion upon each other; of two smooth, elastic, membranous ligaments, about an inch long in the adult, stretched side by side from back to front of the larynx, and leaving between them a chink $\frac{1}{2}$ of an inch wide, they are called the *chordæ vocales*, and the chink the *rima glottidis*; of two small triangular cartilages, to which the hinder extremities of the vocal chords are attached, and which afford leverage to several muscles; of five pairs of muscles, four of which respectively serve to relax and stretch, approximate and draw asunder, the vocal ligaments; while the fifth has the peculiar office of placing them in a certain position, called the *vocalising position*; of a small tongue of fibro-cartilage, which shuts down like a lid upon the upper orifice of the larynx during deglutition, and so assists the muscles that close the rima in preventing food from passing into the windpipe—this is called the epiglottis; and of several other parts, the use of which is not yet clearly made out.

§ Lastly, the cavity of the mouth, the tongue, lips, teeth, palate, and uvula, which modify the tone emitted by the vocal ligaments, and the velum pendulum palati which serves to close the aperture of the nostrils, when occasion requires.

Air, expelled from the lungs, has to pass through the rima glottidis, that is, between the vocal chords; if it sets these vibrating a musical tone is produced, but if not, only a rustling sound as in breathing. These ligaments are capable of sonorous vibration, *i. e.*, are in the vocalising position above mentioned,—*only when their corresponding surfaces are parallel to each other.* If their edges are turned outward or inward, or are curved, or if they

are nearer together at one end than at the other, so that the chink has a triangular form, sound is not produced. Now, in the common position of the vocal chords their upper edges are turned outwards, and their posterior extremities are drawn away from each other, and it is for this reason that we are able to breathe, or even blow violently, through the chink of the glottis, without causing musical tones, while at any moment, by a voluntary act, we can place the chords in the parallel position, and so produce vocal sounds. Mr. Willis, the discoverer of this important circumstance, has illustrated it by some beautiful and conclusive experiments upon membranes stretched in imitation of the vocal ligaments; but they require several diagrams to be intelligible, and may be referred to in his original paper published in the *Cambridge Phil. Trans.* vol iii., to which essay, indeed, we are indebted for our latest and most correct information on the action of the vocal organs.

Mr. Mayo had an opportunity of observing the vocal chords, during life, in a man who, attempting suicide, had severed the thyroid cartilage immediately above them. His account (*Outlines of Physiology*, p. 349) confirms Mr. Willis's deductions; for "when the patient breathed tranquilly the rima glottidis formed a triangular opening; and when he attempted to vocalise (although in one only of several attempts a laryngeal sound was produced) the vocal ligaments were brought nearly parallel, and the rima glottidis became narrow and linear."

The sounds thus produced by the *chordæ vocales* are augmented by the vibrations of the columns of air contained in the mouth and trachea—on the well-known acoustical principles, that when any sonorous body (as for instance a vibrating reed) is brought near a cavity, which, if blown into, would sound in unison with the reed, the air in that cavity is constantly thrown into vibration, and the sound of the reed is greatly reinforced. This is called *resonance*. An unpractised singer has usually a few notes, at about the middle of the range of his voice, which are much louder and more sonorous than those above and below; he has not yet sufficient command over the muscles of the trachea and mouth either to diminish or increase in any great degree the tension of their sides, and they consequently give perfect resonance only to those notes with which, in their natural dimensions, they are unisonant. Constant practice, however, enables him to adapt them with accuracy to all the tones of his voice, which thus acquire an uniform intensity. The full elucidation of this branch of the subject includes several complicated inquiries, which from that very circumstance are inadmissible here, but one on which there is reason to expect a paper from the pen of Prof. Wheatstone.

It was objected to this theory of vocalisation, that a bass singer can produce far lower tones

than either the vocal chords or the columns of air contained in the windpipe and mouth are long enough to cause,—sounds, for instance, which would require an organ pipe several feet long for their production. An experiment of Savart's removed this difficulty. He substituted for the hard, wooden, sides of a square organ pipe, paper sides, supported by a wooden frame, and he found that the pitch of the cavity was thus greatly flattened; upon wetting the paper so as to relax it, the tone immediately sank still further; and in this way he obtained notes two octaves below the natural pitch of the pipe. The original tone was restored to the tube when the paper was again tended by moderate pressure. The mouth and trachea are cavities having just such extensible sides, and since they are furnished with muscles by which their tension can be altered at will, it is easy to understand how the air they contain may produce the bass notes of the voice.

The influence of the trachea was first pointed out and explained by Professor Wheatstone.

Mr. Willis supposes the very high notes to be produced by pressing firmly together more or less of the hinder extremities of the vocal ligaments, by means of the transverse and oblique arytenoid and the crico-arytenoid muscles, so that only the anterior portions are free to vibrate.

The falsetto notes are thought to be obtained by such a regulation of the breath, as to cause the vocal ligaments, or the columns of air in the windpipe and mouth, or both, to vibrate in subdivisions, like the string of an Æolian harp, when sounding a third or a fifth, or some other harmonic above its natural tone; for instance, in raising the voice from a natural note to its octave in the falsetto, each vocal ligament is thought to retain exactly the same length and tension, but to vibrate in two portions separated by a stationary or *nodal* point in the middle; each of these portions, having just half the length of the whole chord, vibrates just double as often, and consequently raises the original note exactly an octave higher; and in like manner the two columns of air are supposed to reinforce the laryngeal sounds by subdivisions, as will be more fully explained when we have to allude to the phenomena of multiple resonance.

The *pitch* of the voice, then, depends upon the *number* of vibrations performed in a given time by the vocal chords, and by the air in the vocal cavities, and the *loudness* of each note upon the *extent* of the excursions they make in vibrating, or, in other words, upon the force with which the air is alternately *compressed* and *rarefied*; but the vowel and consonant articulations differ from both; for each note (within certain limits) may put on in succession all those qualities, without changing either its pitch or its intensity. Upon what they depend we must next consider.

First, of the vowels.

Conrad Amman, in his treatise "De loquelâ," gave the first scientific account of the vowels. He observed the positions of the mouth, and measured the distances of the tongue, teeth, and palate from each other, during their pronunciation, classing them according to these circumstances into dental, labial, &c.; but his researches, though useful and accurate so far as they go, give us no information as to the nature of the vowel sounds, and their essential distinctions one from another.

In 1799, the imperial academy of Petersburg proposed the two following questions, as the subject of their annual prize essay:—

1. What is the nature, and the character of the sounds, of the vowels a, e, i, o, u, so different from each other?

2. Can an instrument be constructed like the vox humana pipes of the organ, which shall accurately express the sounds of the vowels?

These questions gave rise to a valuable memoir by Kratzenstein; to whom the prize was adjudged.

Kratzenstein, in the first place, introduced a new kind of reed (now commonly employed in the construction of the Æolina, Symphonion, &c.) whose tone was much smoother, and more similar to the human voice than that of the common organ-reed.

The difference between the two is the following. The old reed is a tube with an oblong aperture in its side, to which is adapted a tongue of such size as to close the aperture without being able to pass through it; this tongue is fixed at one end and free at the other. When air is urged through the reed, the tongue alternately opens and closes the aperture, striking against its edge, and causing a loud, and harsh, musical sound. Kempen endeavoured to improve this reed by making the tongue of ivory, and covering that, as well as the edges of the orifice, with leather. But Kratzenstein made the tongue of such size as just to pass through the aperture without touching its edges; he thus got rid of the grating sound caused by the rapid succession of blows, and obtained tones very nearly resembling the simple sounds of the human larynx*.

He then, after many experiments, succeeded in obtaining four tubes which, when rendered vocal by his reed, respectively communicated

* Sir J. Herschell and Mr. Willis attribute the invention of this reed to Kratzenstein; but Mr. Wheatstone has shown that he only introduced it into use from China, where it has long been employed in the construction of the tsing. Kratzenstein, noticing this instrument in a curiosity-shop at Copenhagen, was struck with its aptness for his purpose, and procured a copy to be made by an organ-builder; from whom this account was derived.

to its tone the vowel qualities* a, e, o, and u. The remaining vowel, i, he produced from another tube by blowing into it, in the manner of a common organ-pipe, without the reed.

Most of these tubes were of complex construction, being divided by partitions into chambers and cavities, and communicating with the air by several apertures. No other reason was given for these forms, than that they succeeded on trial.

Kratzenstein thus established the important positions that the vowel sounds are not peculiar to the human voice, but may be artificially imitated; and that their qualities may be imparted to musical tones by exciting these latter within certain cavities. *How* his tubes modified the tone, and what was essential, what accidental in their forms, Mr. Willis afterwards explained.

While Kratzenstein was pursuing this inquiry Baron Kemplen, of Vienna, was engaged in a more extensive investigation of the same subject with a view to the construction of a speaking machine. To obtain the vowel sounds he adapted a reed to the smaller orifice of a conical tube, like the bell of a clarinet, caused it to sound by an organ bellows, and then, by covering the mouth of the funnel more or less with his hand, produced three distinct vowel sounds. When the tube was nearly closed, *u* was heard; when about half-covered, *o*; and when quite open, *a*.

De Kemplen found that these sounds can be distinctly recognised only when a rapid transition is made from one of the positions to another: if the cover is kept in any one station for some time, the sound always seems to be *a*. He inferred from this, that the vowel qualities become distinct only by contrast with each other, and obtain their most perfect clearness when connected in words and sentences.

Any person may convince himself of this by prolonging a vowel sound; it soon becomes indistinguishable, but may again be plainly recognised at the moment of passing into another vowel.

The investigation had proceeded thus far,

IEA' O U U O' AEI IEA' O U U O' AEI IEA' O U

the reed, and the tube is supposed to be drawn out to the right; the space from dot to dot equals half the length of the sonorous wave of the reed, and consequently the whole length of the stopped pipe in unison with it; when the mouth of the tube is drawn out to I, the vowel I is heard; when it arrives at E, the vowel quality E is communicated to the tone of the reed, and so on for the rest, the

* According to the Italian pronunciation, *ah*, *a*, *e*, *o*, *oo*. This is important, because these are all simple sounds, whereas our *i* is compounded of *ah* and *e*, and our *u* of *e* and *oo*.

when Mr. Willis commenced his experimental researches, which were published in the Cambridge Philosophical Transactions for 1832. Referring, as before, to the original paper for details, we shall here confine ourselves to the general results of his inquiry.

His first object was to verify De Kemplen's observations with the reed and funnel, and having in this way obtained *u*, *o*, and *a*, very distinctly, he tried the effect of a much shallower cavity on the sound, and by sliding a board to different distances over its mouth, he produced the entire series in the order *i*, *e*, *a*, *o*, *u*, &c. After this he tried cavities of various other shapes, as square, cylindrical and found that, under certain restrictions, they all communicated vowel qualities to the sound.

Having succeeded thus far, he endeavoured to simplify the matter still further, by observing the influence exerted upon the sound by tubes of the same diameter, but of varying length. For this purpose, he constructed an apparatus of sliding telescope tubes (of which an engraving and a minute description will be found in his paper) capable of being drawn out gradually from O to any required length, fitted with Kratzenstein's reed, and supplied with wind from an organ bellows.

Upon sounding the reed, and gradually drawing out the tube from O, to a length equal to that of the stopped pipe in unison with the reed, in other words, from O to half the length of the sonorous wave caused by the reed, the tone of the reed put on successively all the vowel qualities, in the order *i*, *e*, *a*, *o*, *u*; during the elongation of the tube through another equal distance, the series was repeated, but in inverted order, *u*, *o*, *a*, *e*, *i*; in making a third advance equal to the first (so that the length of the tube was now thrice that of half the sonorous wave of the reed), they were again heard more faintly but in the original order; and thus they recurred in cycles, alternately in direct and inverse order, but gradually becoming more and more faint.

The annexed figure below will perhaps make this clearer. *r* represents the place of

letters indicating both the distance and the corresponding sound. The commas represent the centres of the cycles, and it will be ob-

† This experiment, as indeed every other that has been made on the subject, was repeated by Mr. Wheatstone in his recent Acoustical Lectures delivered at King's College, and at the Royal Institution. The vowels are uttered with surprising plainness. When the board was passed rapidly from position *e* to *oo*, and then from *oo* to *e*, the diphthongs *e-oo*, and *oo-e* (you and we) were pronounced as distinctly as though by a human voice.

served that the vowels, whether in direct or inverted order, are always at the same distance from this point and from each other. If the pitch of the reed, *i. e.*, the length of its sonorous wave is changed, the distance between the centre of its cycle varies also, but the distance between each vowel and the centre of its cycle remains always the same.

Now since the explanation of all this requires some knowledge of the laws of multiple resonance discovered by Wheatstone, it is indispensable briefly to advert to these here. Simple resonance has already been explained. When two sonorous bodies, as a musical chord and a column of air, capable of performing the same number of vibrations in a second, are brought near each other, upon sounding either one, the other is thrown into vibration.

But not only will resonance take place when the sound produced by both is the *same*, but also when the number of vibrations performed by the one is any simple multiple of the number performed by the other; in other words, when the sound of the resonant is any harmonic of the original sound. Thus a tube six inches long, and stopped at one end, sounds the note C when blown into, and, consequently, the air within it vibrates to a C tuning fork, by simple resonance; a tube three inches long produces the *octave* of the note C when blown into, but the column of air in it nevertheless vibrates to the C tuning fork, by multiple resonance; the air in the first tube makes exactly as many vibrations per second as the tuning fork, the air in the second performs just double that number. Tubes higher in pitch by one-third, one-fifth, or any other harmonic, enter into vibration by the same law of resonance, because the numbers of their waves per second are respectively simple multiples of the numbers of those of the fork.

Now these multiple resonances take place in certain positions of Mr. Willis's sliding tube, and it is upon the combination of the feeble sounds thus excited with the sound of the reed, that he has proved the vowel qualities to depend. The air in the tube is transmitting at once the primary undulations of the reed and those which are caused by multiple resonance; when the latter have not sufficient power to be distinguished as musical sounds, the ear can yet appreciate them in the vowel quality.

There is, however, a third species of resonance that is neither simple nor multiple, and that might, perhaps, be specially denominated "the vowel resonance;" it is that which takes place between a sonorous body and a column of air, neither unisonant nor harmonic with each other. Its existence cannot be doubted, for vowels are pronounced by Mr. Willis's tube and reed when their proportions preclude the possibility of either simple or multiple resonance; vowel qualities are, in fact, communicated in *every* position of the tube, while these two kinds of resonance can take place only in a few.

The tones of this "vowel resonance" are too feeble ever to affect the ear except when combined with, and vowelising other sounds; its laws, from the variety of dissimilar cases which they embrace, must be extremely complex, and are not yet at all understood. The subject, however, is fortunately under Wheatstone's consideration.

If we imagine the large billows of the sea to be themselves covered with smaller and swifter ripples, we have a rough illustration of the state of the air while conveying the large primary undulations and the feeble resonant waves at once to the ear.

A vowel, then, is a musical note whose undulations are compounded with the feeble vibrations of a higher tone, which may or may not be an harmonic of the first, and it is by the rapidity of these secondary vibrations, *i. e.*, by the pitch of the secondary tone, that the distinction of vowel from vowel is caused; *i* requires the most rapid, and *u* the slowest secondary vibrations, the others having intermediate notes each according to its place in the series.

But if the several vowels have certain notes necessary for their production, a reed so high toned that its vibrations equal theirs in frequency, should be incapable of receiving the vowel modifications; just as, to recur to our former illustration, a billow could no longer be covered with ripples of a certain size, if itself were no larger than one of those ripples; and since the lowest note is peculiar to *u*, *u* should be the first to disappear from the series.

Mr. Willis accordingly found that when a very high reed was employed, the vowel *u* could no longer be heard, the direct cycles ending, and the inverse beginning, with the vowel that immediately precedes it, *o*: upon raising still further the pitch of the reed, other vowels were lost in regular succession. Thus, too, female singers find it impossible to sing *o* and *u* in the higher notes of the voice. The note corresponding to the vowel *o* is C on the treble clef, and on notes above this *o* cannot be distinctly pronounced.

In order to prove that resonance is not essential to the utterance of vowels, and that any other means of obtaining the vowel and primary notes intimately blended are equally effectual, Mr. Willis tried the following experiment:—

To a cogged-wheel in rapid rotation he held a piece of watch-spring by pincers, in such a position that it was caught by the teeth as they went round, and to the musical sound thus produced all the vowel qualities were successively imparted by simply altering the length of the watch-spring.

The explanation of this experiment is very simple. Any noise repeated at equi-distant intervals produces a musical sound, whose pitch varies with the frequency of the repetition. For instance, the clicking noise of a card, whose edge is struck by the tooth of a wheel, produces the note C, when re-

peated 512 times in a second. Again, a watch-spring, held at one end by pincers, and free to vibrate at the other, gives a sound, when plucked, that varies according to its length. In this experiment, then, we have two sources of musical sound, the one depending for its pitch upon the rapidity with which the wheel turns round, the other upon the length of watch-spring free to vibrate. Suppose the watch-spring grasped at such a point as to give the note G, the peculiar note of the vowel *a*, when struck, and the wheel to revolve at such a rate as to sound it 512 times in a second, then, since the note G comes under the class "any noise," we have the conditions for producing the note C fulfilled, and because G is the vowel note peculiar to *a*, we have also the requisite for imparting that quality to C. The air which conveys the sound to the membrana tympani, is thrown into that peculiar state of double undulation which has been already described.

If the spring, its length being retained, is struck only 340 times per second, the note F will be obtained, but the vowel sound *a* will be still pronounced. If, on the other hand, the length of the spring is changed, while the velocity of the wheel remains unvaried, the same primary note will be heard, but with different vowel modifications.

It will be deduced from the preceding remarks, that the vowel sounds are infinite in number; that they pass, by imperceptible gradations, each into its neighbour, and the series which are used in different languages are arbitrarily chosen. We have seen that two of our vowels are diphthongs, *i* and *u*; we also find that several of our written diphthongs are simple sounds, as, for instance, *ei*, in either and neighbour, *ie*, in field and friend, *au*, in taught, and *ou*, in thought, &c.; and that in comparatively few cases do the forms of our written, accurately correspond with the sounds of our spoken, language, the simple representing the compound, and the compound the simple, the same forms having different sounds, and the same sounds different forms, while often no connexion whatever can be traced between the characters and the articulation, as, for example, in the word that is written *w*, *h*, *y*, and pronounced *oo*, *ah*, *e*. The chief difficulty of acquiring foreign pronunciation would be removed if this medley of alphabetical misnomers and doubtful sounds could be reduced into order. If the grand scheme of forming an universal language should ever come to be adopted, a certain number of the most harmonious and distinct of the simple sounds should be selected for vowels, and a separate character appropriated to each.

Kratzenstein's complex cavities, Kemplen's and Willis's simple ones, and the multiform positions of the mouth in articulation, are now, we think, fully explained; their common effect is to produce resonance, simple, multiple, or vowel; and, in thus *ruffling* the undulations

of the primary sounds, to impart to them vowel qualifications. When we think on the delicacy of the distinctions which the ear has thus to appreciate, we cannot be surprised that it needs the aid of contrast to preserve its sensibility to these sounds. Let five shades of olive-green be presented one by one to the eye, and they cannot be distinguished from each other; they all convey the same impression to the mind: but place them side by side, or view them in quick succession, and their several hues are readily discerned. When we remember that colour depends upon certain peculiarities of luminous undulation, the analogy is complete. Such instances exemplify very well the elucidation that each science derives from the others, and the method by which we are able to reason from what is *within* the ken of our senses to that which is far *beyond*. It is for this reason that a student who would hereafter excel in any one science must make himself master of the principles of all. For the successful pursuit of original investigation, a minute acquaintance with details is rarely so needful as a comprehensive view of the connexion and analogies of every branch of physical knowledge. He who can draw upon no resources but those which one or two sciences furnish, may discover new facts, and observe new phenomena—may make diligent use of his hands and his eyes, but is little likely to succeed in induction and generalisation. His range of intellectual vision being narrower, he can never develop extensive laws; he may work, clear away rubbish, or arrange materials at the base, but will add no new turrets to the fabric of science. He will be a carrier of bricks to the builders—useful, but not great.

(To be continued.)

ON THE GENERAL INFLUENCE OF PORK ON THE ORGANIC CONSTITUTION OF PERSONS WHO EXCLUSIVELY PARTAKE OF IT.

BY M. POINTE.

FRESH or salt pork (says M. Pointe) has some remarkable exciting properties, owing to its fibres being so close as not to allow a particle of grease to be situated between them, to a large quantity of osmazone, to the fat which in some regions is dense but in others soft, oily, and very difficult to digest, and particularly to the quantity of spices and salt which are used in curing it. The fibrous and fatty portions of pork resist for a much longer period than any other substance the action of the gastric juice. The digestive apparatus is obliged to act with greater force on the alimentary bolus which offers so much resistance. This physiological condition is thus excited, and constantly subject to such repetitions, producing, as it were, insensibly a pathological state,—either of inflammation or of hyper-

trophy, and frequent organic degenerescence of different natures. These are the local disorders, but there are others which are general and in which may be recognised two different states:—first, the inflammatory excited state of a portion of the digestive tube becoming contiguous with the other portions of this organic apparatus, thus keeping them in a continual state of excitation and heat, causing a general chronic phlegmasia, producing great debility and emaciation, and frequently a true phtisical condition. Secondly, when the preparations of pork have been prepared to assist digestion, which is more or less difficult, and every existing principle being destroyed by the organs, the osmazome generally escapes, and passes into the system, and gives all the living tissues an excited impression, which may produce all the ill consequences that have previously been alluded to. It is not a wrong notion, then, in placing pork and its different preparations among the heating aliments. M. Pointe believes that the influence which it possesses over the health, ought immediately to place it quite as injurious as spirit drinking. The manner in which this diet produces disease is in general so unforeseen, and so slow in its results, that the greatest danger might take place before its baneful effects could be detected. In proof of the truth of this assertion, M. Pointe has illustrated these observations with several well-marked cases, in which the post-mortem appearances demonstrated tuberculous depositions in every organ of the body, more particularly in the lungs.

MEDICO-BOTANICAL SOCIETY.

June 23rd, 1835.

W. H. JUDD, Esq., in the Chair.

SEVERAL presents were announced and placed upon the table, consisting principally of books, plants, and botanical drawings, among which we remarked several fine medicinal plants, presented by Mr. Iliff, specimens of the seeds of various plants and articles of the materia medica from Java, from Professor Martius, of Erlangen, and a drawing of the *Paullinia sorbilis*, whence the *guarana*, which is so much used on the continent at present, is obtained. Among the specimens of the materia medica was a fine one of the gambier, whence the catechu is procured. A communication from the Professor accompanied these presents, but was not read, as sufficient time for its translation had not elapsed.

Papers on Poisoning by Belladonna, by M. M. Laurend and De Claubry, and an Essay on the Bitter Manioc, by M. Henry, which will be found in the pages of this journal, were then read.

After which Dr. Sigmond gave a *resumé* of the proceedings of the session, congratulated the Society on the nature and importance of the essays which had been read, and of the lectures which had been delivered, and also

on the accession of new members, concluding with remarks on the value of a knowledge of medical botany, and its utility to the profession and the public.

The meeting was adjourned to the second Tuesday in November.

APOTHECARIES PRACTISING MEDICINE.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,—It has been frequently asserted that it is only of late years that apothecaries have attended patients and prescribed for them, and the former editor of your journal has not hesitated to say, that, had the College of Physicians done its duty, they would never have been permitted to visit the sick, but would have been kept to the dispensing medicine, &c. In making this remark he has shown himself unacquainted with the ancient records of medicine, for they tell us plainly that in early days, though all the professors of the healing art were called *medici*, rendered physicians, yet they all dispensed their own prescriptions, and many of them kept open shops, consequently they were *bonâ fide* general practitioners. It was not until the time of Erasistratus, the vivisector, that the division of the professors into three branches—physician, surgeon, and apothecary, took place, though even then many continued to practise the three departments, and for a long while the apothecary was looked upon and treated as the equal of the physician, being also called by the same name, viz. *medicus*. During that period, emphatically called the dark ages, physicians assumed the higher rank, and considered that when they had pronounced any opinion respecting a case, both the surgeon and the apothecary should join them without hesitation. The former has already emancipated himself from this injurious thralldom; the latter is making great progress in his attempts at gaining the ascendancy.

Many are of opinion that until the act of 1815, as it is called, general practitioners had no legal right, and were not recognised by the houses of Parliament as entitled to attend the sick, but that this is an error, the following quotation from an act passed in the reign of William III. will plainly show.

“An Act for exempting Apothecaries from certain offices, &c. An. 6-7 Will. III.

“Whereas the act of the Apothecaries is of great and general use and benefit, by reason of their constant and necessary assistance to his Majesty's subjects, which should oblige them solely to attend the duties of their profession, yet by reason that they are compelled to serve several parish, ward, and leet offices, in the places where they live, and are frequently summoned to serve in juries and inquests, which take up great part of their time,

they cannot perform the trusts reposed in them as they ought, or attend the sick with such diligence as is required, be it enacted," &c.

Again, Dr. Garth, in his clever satire, the *Dispensary*, introduces the Company of Apothecaries exclaiming, when informed of the intention of the College of Physicians to erect a dispensary—

"And dare the College of Physicians aim
To equal our fraternity in fame?
Crabs'-eyes as well with pearls for use might try,
Or Highgate-hill with lofty Pindus vie,
So glow-worms might compare with Titan's beams,
Or Hare-court pump with Aganippe's streams."

That physicians did not always despise the practice of the pharmaceutic art, we may guess from the description of Dr. Howe, furnished us by the same author—

"Beneath his blazing orb bright Quерpo shone,
Himself an Atlas, and his shield a moon.
A pestle for his truncheon led the van,
And his high helmet was a close-stool pan.
His crest an *Ibis*, brandishing her beak,
And winding in loose folds her spiral neck."

The reason the *Ibis* was chosen as the crest of this redoubted warrior may be the following. This creature is, or rather was, reported to have the habit of introducing its bill into the anus, and injecting a quantity of water into the intestines, thus administering an enema.

I have now probably said enough to vindicate the apothecary from the slur generally cast upon him, and to show that he should hold as high a rank as the physician.

I have the honour to be, gentlemen,
Your's obediently,
PHARMACEUTES.

HEISTER v. VELPEAU.

To the Editors of the *London Medical and Surgical Journal*.

GENTLEMEN,—On looking over some of your back Numbers, I find, in an Analysis of a Memoir read before the Institute of France by M. Velpeau, contained in your *Journal* for April 11, page 340, a notice of not an uncommon complaint arising from pinching a portion of the mucous membrane between the teeth, and which, it is said, has not hitherto been described, and which is curable by the local application of alum.

French surgeons are in general too apt to assume as their own discovery things which have been known years before they were in existence; and I am sorry to say this assertion of M. Velpeau's is not an exception to the rule. In Heister's surgery, if he will take the

trouble to refer to it, he will find a chapter devoted to the consideration of this affection, and the remedy he suggests strongly recommended, as indeed the only thing likely to be of service.

I have the honour to be,
Gentlemen, yours, &c.
SUM CUIQUE.

June 18th.

THE

London Medical and Surgical Journal.

Saturday, July 4, 1835.

A FEW HINTS ON MEDICAL INSTRUCTION.

IN a leading article of our last number we endeavoured to impress on the minds of our professional readers the necessity of a more liberal and systematic delivery of clinical lectures on the part of the physicians and surgeons of hospitals, and a stricter and more regular attendance upon them by the medical student. We also glanced at the difficulties the pupil experiences in comprehending lectures as they are now given, owing to the want of a sound preliminary education; and we now add, that the latter defect is principally caused by the evils arising out of the present absurd system of apprenticeship. This system operates injuriously both to the profession at large, and to the interests of the individuals, by inducing a great many young men to come into it, who are not adapted by education or subsequent prospects to take a proper standing in it. The system of apprenticeship, as now carried on, causes young men to pass their time, for the most part, in a way not at all conducive to their mental or professional improvement. It is true, an apprenticeship, to a certain extent, and under restrictions of a liberal complexion, may be desirable and advantageous to the pupil; but apprenticeship, as it operates now, is extremely bad. The Company of Apothe-

carries alone requires it, and so far may be considered as having a monopoly in those who are bound for five years, in order to be eligible to examination for their licence.

But although the Apothecaries' Act *only* requires this servile bondage, the sin of introducing into the profession young men who are by no means qualified by education for such a station, does not lie entirely with the Worshipful Company. The College of Surgeons perpetrate a similar evil in a minor degree; not indeed arising out of any compulsory apprenticeship, but from the interpretation they put upon their own regulation; for they decide that a druggist's shop-boy is engaged in the acquirement of professional knowledge; and if, to this bright qualification he can contrive, by any means, to add their curriculum, he is deemed a fit subject for their examination, and to become a member of their College. This practice opens a wide door for the admission of those whose general education has been neglected.

The principal defect, however, in the present system of apprenticeship, is the mode of training up the apprentice. He comes to his master, and almost immediately commences to prescribe for the sick, even before he has learned the very first rudiments of pharmacy or anatomy. His master, if a scientific man, may be inclined to give him some share of instruction, but he cannot, owing to the calls of his practice, do so to any considerable extent; and the consequence is, that his pupil has habits formed before he commences his regular medical studies, and those habits, unfortunately, are not always of the most correct or advantageous description. Many come up to London after having undergone the drudgery of apprenticeship, who, from defects of their understanding, are utterly unfit for the

profession, and this they do not find out until the period of examination; whereas, under a better system, the discovery would have been made before they entered upon their apprenticeship. The age of fourteen or fifteen, the period when those who have the direction of youth generally think of binding them to the apothecary or druggist, is not the most fitting to give them a fair chance to judge for themselves and make a choice of which they will not thereafter repent. The age of seventeen or eighteen, with a good education up to that time, would be infinitely preferable. We should not then see so many disappointed faces in the profession, or witness the continual bickering, and underselling rivalry which now universally pervade it. The public would then be provided with a class of practitioners for whose knowledge of principles, technical skill, and honourable character, a sufficient guarantee would be presented by the very discipline they must have undergone both prior to, and during the period of, their medical studies. And the practitioner himself, invigorated by long continued habits of mental application, would become a more energetic, well informed, and useful member of society than he can pretend to be while things rest as they are.

But in order to render the profession thoroughly respectable and useful to the community, it will be necessary to enlarge the present inadequate plans of furnishing medical knowledge, by instituting at every hospital to which a school is attached the regular and daily delivery of clinical lectures, and also periodical examinations in all the sciences taught within such schools. The present inefficient mode of examination into the student's qualifications for the diploma and licence, should also be revised, or altogether abandoned, as affording no criterion of his abilities,

farther than a strong memory, unaided by actual experience, can be so called. There is nothing practical in it. It consists entirely of question and answer, and a skilful *grinder* is at all times able to drill his pupil into a capability of satisfying all the demands which may be made in that way upon him. It has been said, indeed, by an eminent surgeon and examiner at the College of Surgeons, that "nothing was so easy as to detect a young man who had been *ground*. That he might know the first muscle, and what was next beneath it, but that so soon as one began thoroughly to unfold the body, and to question him about what was situated interiorly, he would be at a loss." Perhaps this might have been the case formerly, but every tyro in the profession is well aware, *now*, that there exist facilities which smooth down those difficulties. There are, for instance, ingenious myologic maps, in which, upon lifting up the superior muscle, the inferior is exposed to view. And this scheme has been further improved upon, by introducing into the chart the representation of all the other parts, as well as the muscles; beginning at the common integument, and ending with the bones and their ligaments. There are few, also, in the medical world at least, who have not either seen or heard of that ingenious contrivance of foreign art, a model of the human frame, in which its different organs are accurately described, and removable one after another, so as to expose the whole *seriatim*. Now any man who would study works like these, could pass his examination at the College, and yet be as ignorant of the use of the scalpel as may be well imagined.

Something more practical in the mode of examining, then, is called for; the bare bandying of question and answer being anything but satisfactory as a test of pro-

fessional competence. Let the examinations in anatomy be entirely, and those on surgery as far as practicable, on the dead body, and then no mistake could occur. For when a man was examined upon a dead body, and was required to demonstrate the brain, or to dissect and demonstrate particular portions of the body, then there could be no deceit or mistake as to his capability. The mode pursued now is certainly easy to both examiner and examinee, but farther it avails nothing either to render the profession respectable, or the public secure. In some parts of the continent a young man is never suffered to practise before he has exhibited his proficiency in operating upon the dead subject; and explaining it anatomically, and, until this is the case in England, we shall have but a lame account of surgical operators.

In England, men who are chosen as hospital surgeons or physicians continue in office for life. This regulation keeps down the number of effective operating surgeons and practical physicians, and of course prevents the public, more especially the country districts, being so well served as they would be were the offices only held for a short term, say from five to seven years. In the case of a medical officer being elected to a hospital for life, but few can attain that degree of experience and excellence which the numerous and complicated cases there presented afford, and these few would have their services, unless when given to the hospital, called for only by the affluent; but let there be a succession, renewed at the end of every five or seven years, and a far greater number of well qualified practitioners would be furnished, and the community be better attended. Each succession of medical officers would be amply rewarded for their services by the

celebrity and practice which their situation had secured them, and medical art be advanced in a much more considerable ratio than it is under the existing system. New energies would be constantly supplied for the furtherance of our science, and the slumbers which now ordinarily seize our hospital corps of eminent almost immediately after their election into office be disturbed, *at least periodically*. We should have men who, instead of dozing over their duty, would feel anxious to discharge it energetically; and, knowing that their time was limited on the hospital stage, they would strive to gain fame and favour within the given period by means which, although laborious, would be sure to secure them both. Men elected as medical officers of hospitals under such restrictions, would not, we are of opinion, object to or neglect giving regular and daily clinical lectures, since, through them, they would become more widely known, and consequently more extensively employed in private practice, the chief good, after all, aimed at by such as seek those prominent stations. Five or seven years would be sufficient to bring a man's medical and chiral attainments to maturity and to establish his name. For the duties he had performed he would have been amply remunerated in character and money, and he ought at the expiration of the before-mentioned time to retire and leave the arena clear for a successor, whose energies are unworn, and who has the prospect of gaining a name in his profession before him acting as a stimulus to exertion; in a word, much good might be effected by restricting the appointment of medical officers to public institutions to a term of years, instead of continuing their office for life.

We conclude our observations on this subject here for the present, but shall probably resume them in a future number.

THE HARVEIAN ORATION.

SIR HENRY HALFORD delivered the other evening at the College of Physicians the anniversary Harveian oration. A large audience, among whom were the Duke of Wellington, the Marquis Camden, and many other distinguished and learned personages, honoured this most classic of all presidents with their attention, and, we hope, did justice to his Latinity. It would appear that, ever since the death of Sir George Tuthill, Sir Henry has been labouring, tooth and nail, at his "Ainsworth," in order to fill the hiatus which Sir George's death occasioned in the arrangement which appointed him (Sir G.) the orator for the year.

Sir Henry exhibited his usual taste for necromancy on this occasion, and, conjuring the spirits of the dead out of their graves, marshalled them before his brilliant auditory. There were the ghosts of Tuthill, Maton, Powell, and Anslie present (shivering, as they well might, for the evening was cold), to hear their characters described by the *Præses* in good set terms; but Hooper's shade, by some hap to be accounted for, no doubt, in very elegant Latin by the orator, was either absent or in the back-ground unseen, and his post mortem dirge omitted. *O si sic omnes!* and that the *Præses* would leave the graves of the dead unopened, and their posthumous praises unuttered, or uttered more faithfully. What can Sir Henry mean by thus ever raking up the dead? Does he study perchance by moonshine, or in a churchyard among tombstones? or is there nothing better left for

the head of so learned a body to chronicle in these degenerate times—nothing better to ponder upon than the actions and peculiarities, while living, of a few princes or physicians, as the case may be, who have thrown off their “mortal coil?” Why, we beseech him, will the learned President go on raising before our eyes lugubrious recollections scenting of the charnel-house—dreary visions of—

“Entity and quiddity,
Where ghosts of defunct bodies lie.”

Why this itching and hankering after phantasms and eschewing of realities? Is there, in the names of all the ghosts which even the power of Sir Henry could call from the “vasty deep,” no subject of public and scientific magnitude and utility over which his genius can throw some light? Can he fling no lustre except over the darkness of the yawning grave, or expatiate on no theme more interesting to the living than that of the “voiceless tenants of the tomb,” tenants, too, whose histories were probably as well known to all present who cared a fig about the matter, as the *Præses* could possibly make them known by means of his classical Jeremiad?

We would whisper a few words in Sir Henry’s ear, and here we need no ghost to prompt us. Sir Henry, have you had time to spare lately from your not at all superficial historic investigations to inquire into the state of that body over which you have so long presided? Have the post mortem playthings you so much admire allowed your attention to stray from them for a moment, and to fix itself upon the jarring state of which you “umpire sit?” To be short, have you observed that nine-tenths of your subjects (if the Licentiates of your College may be so called) are in a state of rank rebellion

against you and your body-guard, the Fellows? The radical knaves, as perhaps you would designate them, are throwing up their caps, and uttering a deal of breath for reform, and will not be satisfied until they get that or some phantom in its shape. Would it not be better, Sir Henry, as you are given to conjuration and dealings with the dead, that you should employ your time and skill in concocting some such phantom (the reality is not to be thought of) to blind their eyes and appease their cravings? At all events, if you do not this, take up the subject *vice versa* on your very next appearance as orator, and astound the varlets with a philippic against their appetite for change—Greek, Latin, or homely English, no matter which, but give it them home!

COURT OF EXCHEQUER.

JONES v. BRAMWELL.

THIS was an action brought by an attorney, the trustee of an infant, who had been bound apprentice to the defendant, a person practising as a general practitioner; but who, it appears, had no other qualification than his having been an army surgeon, and the degree of M. D. from Edinburgh, consequently was not entitled to practise. The defendant paid the 100*l.* into court, and proceedings were stayed. Of course the articles of apprenticeship were cancelled.

HYPOCHONDRIASIS.

To command or advise a person labouring under nervous depression to be cheerful and alert, is no less idle and absurd, than it would be to command or advise a person, under the direct and most intense influence of the sun’s rays, to shiver with cold, or one who is “wallowing naked in December’s snows” to perspire from a sensation of excessive heat. The practice of laughing at or scolding a patient of this class, is equally cruel and ineffectual. No one was ever laughed or scolded out of hypochondriasis. It is scarcely likely, that we should elevate a person’s spirits by insulting his understanding. The malady of the nerves is in general of too obstinate a nature to yield to a sarcasm or a sneer.

REID on *Insanity*.

MEDICINAL INTEMPERANCE.

THE real prudes in regimen are those who "strain at a gnat and swallow a camel;" who would have great scruple perhaps in drinking a glass of wine, but who would not hesitate every day of their lives to ingurgitate, in a pharmaceutical shape, draughts composed principally of the worst and most concentrated spirits. Tinctures are medicinal drams. The habitual use of them can be regarded only as a more specious and decorous mode of intemperance. In this may be said to consist the privileged debauchery of many a nervous valetudinarian. A finale of decorum and delicacy may, in this way, ruin most effectually her health, without in the slightest degree impairing her reputation. She may allay the qualms of the stomach, without the danger of occasioning any more disagreeable qualms of conscience.

REID *on Insanity*

THE INFLUENCE OF THE MIND ON THE BODY.

HE who, in the study or the treatment of the human frame, overlooks the intellectual part of it, cannot but entertain very incorrect notions of its nature, and fall into gross and sometimes fatal blunders in the means which he adopts for its regulation or repair.

Op cit.

Foreign Medicine.

A simple and easy Process for seizing the Stone in the Bladder with the Percussor Lithotrite, or the Instrument which acts by pressure.

BY L. LABAT, M.D.

THIS part of the operation has been properly considered the most important and most difficult. It may be readily conceived, that as soon as the stone has been rightly secured between the two branches of the instrument, the percussion or pressure necessary to crush may be easily performed. If, therefore, we can reduce the seizing of vesical calculi to two fundamental principles, a great service will be rendered to lithotripsy, an important part of surgery, which many practitioners do not attempt, on account of the dangers with which they believe it environed.

The measures which, after repeated researches, appear to be most certain and easy of application in seizing the stone in the bladder, even when it lies in the fundus of that viscus, or behind an enlarged prostate, are as follows:

The bladder being previously injected, and the lithotritic instrument introduced, its beel should be directed towards the posterior and inferior part of the bladder, where calculi are generally found. As soon as the stone is touched the instrument should be gently slid either to its right or left, without losing con-

tact of the calculus, the beak of the instrument being always kept turned upwards in such a manner that the heel should always touch the stone. The female branch being then fixed steadily with the left hand, the male is to be drawn back with the right, so as to open the lithotrite without changing its position or losing contact. The instrument should then be inclined towards the side of the stone, and then the male branch being re-applied to the female, the calculus, whether great or small, will be inevitably seized; the instrument will then be turned to an upright position, and pressure or percussion employed, either alternately or simultaneously. This being effected, the same process may be repeated with those fragments which are considered too large to be expelled with the urine.

If there is any column or projection near the middle of the fundus vesicæ, as is not unfrequently the case in females, the calculus being then either to the right side or the left of this prominence, the heel of the lithotrite must always be passed to that side of the stone corresponding to the centre of the bladder; by these means we may be almost assured of not displacing the calculus, and also of being in the best position to seize it conveniently.

This will do in ordinary cases; but there is another plan to be pursued to lay hold of the stone, when it lies behind the projection caused by the middle lobe or transverse portion of an enlarged prostate. In cases of this kind it sometimes happens that the stone is situated so deeply behind the neck of the bladder, that sounds and lithotritic instruments pass above it without even touching it. Under these circumstances the patient has been made to undergo what is called the *basicule* motion, in order to displace the calculus and bring it to the upper part of the bladder. If, in spite of this manœuvre, the calculus has not been dislodged, and consequently can neither be touched nor seized, the following manœuvre, which I have imagined, will probably succeed.

The lithotrite should be turned in such a manner as to direct its beak immediately behind the neck of the bladder, where we can never fail to find the stone, on the top of which the point of the instrument should be lightly pressed; then, taking the female branch in the left hand, its vesical extremity should be passed a little, two or three lines, beyond the calculus, always having care to keep motionless the female branch, the beak of which being a little shorter than that of the other, should be lowered about a line in order to be in contact with the top of the stone which has just been abandoned by the female branch. This being done, the male branch is to be drawn towards the operator, bringing back with it the neck of the bladder, and then plunging the beaks of the two branches towards the lower part of the viscus, and passing forwards again the male branch as if to close the instrument, the stone will be seized, let its shape, size, or smallness, be what it will, or

however deep the cavity in which it may be lodged.

These two proceedings are so easily understood when they have been once seen, that I have been always able to render them familiar to those medical men who have attended my demonstrations in lithotomy. Among others, I may mention MM. Lallemand* and Dieffenbach, Dr. Fisher, and Messrs. Thomson and Phillips, who, after a single sitting, have been able to seize the stone and crush it, be its position what it may.

Annales de la Médecine Physiologique.

Cholera—A Leech in the Cæcum.

M. T. soon after returning from a part of the country where the cholera was very severe, was seized with the premonitory symptoms, for which he was suitably treated, and with relief. A few hours, however, had only elapsed ere he became much worse; violent colics supervened, followed by the passage of blood from the rectum, more especially after the administration of enemata. Severe dyspnoea was soon added to his symptoms, and he died suffocated early the ensuing morning.

On a post mortem examination the lungs were found to be much gorged with blood, otherwise healthy; heart voluminous. The stomach presented a large ulcer, which had penetrated through the mucous muscular coats at the cardiac orifice. The small intestines were tolerably healthy, but at intervals there were rather large ulcerations of the mucous membrane. On examining the large intestines three small ecchymoses were discovered with a slight puncture in the centre of each, and rather nearer the ileo-cæcal valve a dead leech was discovered. From the punctures made by it probably proceeded the blood which was discharged by the anus.

Lancette Française.

British Hospital Report.

NORTH LONDON HOSPITAL.

CLINICAL REMARKS, BY PROFESSOR ELLIOTSON.

GENTLEMEN,—I have now got nearly through the whole of my old cases, and shall soon come to those you have observed more recently in the wards. But there are one or two interesting cases still among the old ones, on which I have not spoken to you. One is that of a man named King, aged 37, a tailor, admitted March 10. He had phthisical symptoms. Tailors, I should say, are one of the most unhealthy races of men in London; they are much addicted to spirit drinking, particularly in the morning; they work in large numbers in confined apartments, take little exercise, and sit at their work in a posture

materially impeding the circulation. As this man had been also severely flogged in the army, and fifteen months ago had had an attack of hepatitis, I concluded that he was suffering from phthisis, although there was no ulceration. I was also grounded in this opinion by his sallow appearance and peculiarly rapid breathing; these are two symptoms which you will almost always observe in cases of phthisis. His pulse was 90; tongue dry and furred, and he expectorated mucus tinged with blood; his bowels were very irritable and cough violent; there was also a crepitant rattle high up in the chest, which, if there be no ulceration, shows that you may soon expect it. He had suffered from three syphilitic attacks, and had two buboes in the right groin from the last, and took cold on the mercury he was taking for their eradication. As the crepitant rattle evinced the presence of inflammation high up in the chest, leeches were applied below the clavicles, and he was put on middle diet; he also took pil. hydrarg., which you may give in phthisical affections if inflammation exists, as it did in this man. The leeches were repeated several times, and the blue pill continued until the 21st, when the mouth became sore, and the breath had a mercurial fœtor. On the 24th, a blister was applied under the clavicles.

April 1st. No pain in the chest, but considerable muco-purulent expectoration. On the 12th, pulse 76; morphine was ordered to be given every night to procure him some sleep, and a scruple of the solution of hydriodate of potass three times a day, to relieve some severe rheumatic pains in his legs. The pain was nearly gone on the 20th, and the cough much less violent. It was necessary to apply a few leeches again on the 23rd, but he went out on the 26th materially benefited. He will probably die of phthisis, but if he keep low in diet, &c., and regular in his habits, it is probable that he may live many years.

Tubercles are not generally disposed to multiply without an exciting cause, though there is no rule as to the rate of their increase. Last October twelve months I attended a lady for a month or two, and all at once discovered a large cavern in her lungs, which I had not perceived before. Notwithstanding this, however, she is still pretty well, at all events not worse than she was before the cavern was formed. This case shows you that a very serious phthisical symptom may continue a long time without immediate danger. A case which I saw yesterday was quite the reverse of this. It was a young lady, about sixteen years of age, who had just returned from the West Indies; during her residence there she had been in good health, but on her passage home, consumptive symptoms showed themselves, and increased with such fearful rapidity, that when I saw her she had the hectic flush, rapid pulse, and copious sweatings, peculiar to the advanced stage of

* Since dead.—EDS.

phthisis; indeed, I should say she will not live a week. Here you see was a case in which the symptoms appeared in a healthy person without visible cause, and brought the patient to the brink of the grave, within a month from their first appearance. Now, if called to judge between the cases, any one would have supposed the elderly lady who had been long afflicted to be the most probable victim, so that, as I said before, it is evident there is no rule which you can apply to the duration or termination of this disease.

There is another case which I shall mention, as it is rather curious. It is that of an old man who had gouty secretions of urate of soda in his ears. It is curious, not as regards the secretion, for that is common enough, but on account of its situation, as I have seen numberless cases of chalk-stones, as they are called; but never before one in which the matter was deposited in the ears. This gouty secretion is sometimes of a cream-like consistence, so that it can be squeezed from the parts where it has lodged: sometimes it is powdery, but more generally it is hard, and situated about the hands and knuckles. I saw a gentleman a few days ago, who had, I should think, several hundreds on his hands, from the size of a pea to a pin's head; some of them merely covered by the skin; others so deep that they were not discernible by the eye; by which his hands were very much distorted. As to the case in the hospital, we could do nothing for the man, there being no medicines which will produce the absorption of this kind of secretion, any more than they will biliary or urinary calculi.

We have had also some instances of the ill effects of lead on the muscular system, on which I have not spoken to you. There was one in a man named Edwin White, a brass-cock founder. He had been in the habit of drinking a good deal, and was altogether very irregular in his habits. He was affected by pricking pains in the shoulder. Then his arms became partially paralysed, and the muscles much emaciated. When lead is taken by the mouth, the general symptom is colic of a very severe kind, called, as you know, colica pictonum; but when any part of the body is exposed to it, either in the form of oxide or gas, that part becomes paralysed, and the muscles emaciated. Painters are very subject to this affection in their arms, from the continual splashing of the paint on them; and those employed in manufactories where lead is much used, become subject to its influence while it is in the atmosphere. There can be little doubt that lead and other metals are taken into the atmosphere, as these cases serve to show; and there is a well-authenticated instance of a whole ship's crew being salivated by some mercury which ran about the ship from the breaking of the vessels in which it was badly secured. I think there are two cases of this kind, but I am sure of one.

After death the muscles appear peculiarly pale and sometimes seemingly altered in structure. Dr. Carswell says, that the muscular fibres become ossified, each fibre becoming a thread of bone. Others deny this, saying that the cellular tissue only is ossified. The treatment in this case was the same as in that of a pewter polisher we had in the hospital, aged 39. He was employed all day at his occupation, consequently his arms were covered for a long time with whiting (which is a preparation of lead) and oil. His face was sallow and doughy, and he had pains in the lumbar regions, with colicky symptoms. His arms were partially paralysed, the wrist involuntarily dropping directly it was raised. The muscles were emaciated, particularly the *abductor pollex*, which had been much exposed to the action of the lead. As to the treatment, I think electricity is the best stimulant of the muscles, as it reaches every fibre, while blisters, &c. only affect the surface. It does much more good when given by sparks than by shocks: this you will invariably find to be the case, as the shocks deaden the muscle, while the sparks stimulate it. Strychnine is also a very valuable stimulation of the muscles, though it is a medicine which all cannot bear. This man was electrified, and on the 10th of March had one-tenth of a grain of strychnine three times a-day. On the 12th, there were pain and twitching of all the muscles. On the 13th, the legs became affected, and as he was giddy on the 14th, the strychnine was omitted. On the 15th, he had nausea and pain in the temples; and on the 17th flatulence, with muscular twitchings every hour. On the 21st, some of the large joints became sore, which soreness had increased on the 24th, but on the 28th was nearly gone, when one-twelfth of a grain of strychnine was given three times a-day, which was increased to a tenth on the 31st, and to a ninth on the 4th of April. Soon after this, swelling and redness of the parts came on, with pain in the abdomen, and the strychnine was again omitted; but on the 24th, the swelling and redness being gone, he had one-tenth of a grain three times a-day. On the 26th he had pain in the wrist. On the 29th the wrist became red. On account of the dropping of the wrist, I ordered him to wear splints day and night, they being of very little use if left off at night. The strychnine was discontinued. On the 5th of May the arm was much increased in strength, and by the 24th he had much more use in it. On the 26th a blister was applied round the right arm, and he was discharged on the 9th of June, much relieved by the remedies used. The strychnine had a fair trial in this case, as it was given after we had been compelled to leave it off three times; but it always produced the same symptoms. I do not know whether it was the electricity, or the blister, or the strychnine, which did this man good; at all events, the plan of stimulating the muscles was a successful one.

Toswill, Bailey, and Co.'s Adhesive Plaster.—We can recommend this plaster to our professional brethren with great pleasure: it possesses the softness of soap-plaster and the adhesiveness of diachylon. We have used it, and think it a very valuable plaster. The same firm has brought out an excellent kind of lint at a very low price.

Mr. Knowles, surgeon, of Birmingham, performed the Cæsarean operation on a poor woman a few weeks ago. Both mother and child are doing well.

APPOINTMENTS.

Military.—Hospital Staff—Edm. Dowell, gent., to be assistant-surgeon to the Forces, v. Howell, promoted.

General.—Dr. Peter Wood, physician to the Chorlton cum Medlock Dispensary, Manchester.

Resignation.—Dr. Roscoe, physician to the Westminster General Dispensary, Gerrard-street, Soho.

DEATHS.

Mr. J. M. Mugliston, of Grafton-street, Fitzroy-square, surgeon. Mr. Joseph Thompson, of Pontefract, surgeon. At Old Calabar, Mr. John Henry Duckett, of Liverpool, surgeon, of the merchant ship Agnes. Dr. James D. Maycock, of the Royal Crescent, Bristol. At Calabar, Mr. John Barker, of Burton-in-Lonsdale, surgeon, of the brig Protector, of Liverpool. Mr. James A. Murray, surgeon, of the East India Company's chartered ship Elizabeth. Dr. John M'Kittrick, of Dunpatrick. Mr. William Clark, of Morpeth, surgeon. Mr. Boyd M'Crocket Spiers, of Renton, Dumbartonshire, surgeon.

WEEKLY BILL OF MORTALITY.

London, Tuesday, June 30, 1835.

Abscess	2	Hernia	1
Age and Debility	22	Hooping-Cough	4
Apoplexy	5	Inflammation	18
Asthma	4	Inflammation of the	
Cancer	1	Bowels & Stomach	2
Childbirth	4	Inflammation of the	
Consumption	55	Brain	4
Convulsions	23	Inflammation of the	
Croup	5	Lungs and Pleura	6
Denitition, or Teeth-		Liver, Diseased	1
ing	3	Measles	6
Dropsy	11	Mortification	1
Dropsy on the Brain	12	Paralysis	3
Dropsy on the Chest	1	Rheumatism	1
Erysipelas	1	Small Pox	21
Fever	8	Spasms	1
Fever, Scarlet	9	Unknown Causes	4
Gout	2		
Heart, Diseased	1	Stillborn	21

Buried, Males 113 Females 122 Total 255
Increase in Burials reported this week, 15.

BOOKS RECEIVED.

Medical Quarterly Review, No. VIII.
Edinburgh Med. and Surg. Journal, No. CXXIV.
The Nursery Gem; or, the Physical and Mental Education and Management of Children from an Early Age. By HENRY CONGÈVE. Hurst. Cross. 1835.
This is a very small but a very sensible little work. Every young mother would find its precepts a great acquisition.

METEOROLOGICAL JOURNAL FOR JUNE.

Days of Month.	Moon.	Thermom.			Barometer.		De Luc's Hygrometer.	Winds.		Atmospheric Variations			
		51	61	48	29.64	29.75		47	50	S.	S.S.W.	Cloudy	Rain
1		51	61	48	29.64	29.75	47	50	S.	S.S.W.	Cloudy	Rain	Cloudy
2		50	64	53	29.72	29.73	50	49	S.E.	S.S.E.	—	Cloudy	Fine
3		55	61	50	29.64	29.72	47	48	N.E.	N.N.E.	—	—	Cloudy
4	F Q	59	67	51	29.77	29.78	48	50	N.	N.	Fine	Fine	Fine
5		59	62	54	29.80	29.83	51	57	N.	N.	Cloudy	Cloudy	Cloudy
6		61	64	60	29.79	29.79	55	55	N.	N.E.	Fine	—	Fine
7		71	76	69	29.80	29.82	53	50	S.E.	E.	—	—	—
8		72	80	65	29.84	29.88	49	45	E.	S.S.E.	—	Rain	—
9		78	78	65	29.92	29.92	42	44	N.E.	N.N.E.	—	Fine	—
10	FM	77	81	70	30.02	30.05	46	43	N.N.E.	—	—	—	—
11		79	81	66	30.10	30.19	45	39	N.N.E.	E.	—	—	—
12		74	80	59	30.07	30.11	40	49	N.	N.	—	—	—
13		60	64	59	30.06	30.00	47	50	N.	N.E.	Cloudy	—	—
14		63	69	60	29.61	29.70	51	43	E.	E.	Fine	—	—
15		70	74	55	29.75	29.95	47	45	—	N.N.W.	—	—	—
16		67	73	65	30.00	29.92	45	45	N.W.	N.W.	—	—	—
17		71	75	56	29.86	29.81	45	46	N.N.W.	N.W.	—	—	Rain
18	L Q	62	67	49	29.81	29.76	46	47	N.W.	N.N.W.	—	—	Fine
19		65	70	57	29.72	29.65	48	50	W.N.W.	W.	—	—	—
20		63	67	54	29.77	29.60	52	43	W.S.W.	W.N.W.	—	—	Cloudy
21		56	62	51	29.58	29.53	43	47	N.N.W.	N.W.	Cloudy	—	—
22		59	69	55	29.56	29.51	45	49	S.W.	S.W.	—	—	—
23		58	68	59	29.40	29.44	49	49	S.S.W.	S.S.E.	Fine	—	—
24		50	60	49	29.36	29.40	49	49	S.E.	S.W.	Rain	Rain	—
25		56	62	47	29.14	29.14	49	47	S.W.	W.S.W.	Cloudy	—	—
26	N M	57	62	45	29.61	29.51	48	53	W.S.W.	E.	Fine	—	Fine
27		55	61	59	29.39	29.81	52	40	W.	W.N.W.	—	Fine	Fine
28		52	59	46	29.92	29.95	40	45	W.N.W.	N.E.	—	—	—
29		56	66	53	29.93	29.94	45	42	E.N.E.	N.N.E.	—	—	—
30		64	66	53	29.85	29.84	42	47	N.E.	E.N.E.	—	—	—

The quantity of rain fallen in June was one inch 80-100ths.

80, High Holborn.

WILLIAM HARRIS and Co.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At Sir Patrick Dun's Hospital, during the
Session of 1834-5.*

LECTURE XIX.

GENTLEMEN,—I have already mentioned that the disease called scarlet fever assumed a very benign type in Dublin soon after the year 1804, and continued to be seldom attended with danger until the year 1831, when we began to perceive a notable alteration in its character, and remarked that the usual undistinguished and inflammatory nature of the attack was replaced by a concealed and insidious form of fever, attended with great debility. We now began occasionally to hear of cases which proved unexpectedly fatal, and of families in which several children were carried off; still it was not until the year 1834 that the disease spread far and wide, assuming the form of a destructive epidemic. The nature of the disease did not appear in the least connected with the situation or aspect of the patient's dwelling, for we observed it equally malignant in Rathmines as in Dublin, on the most elevated habitations on mountains as in the valley of the Liffey. It raged with similar violence at King's Town, and throughout the provinces, exhibiting, so far as I have been able to learn from country practitioners, the same type over the whole of Ireland. The state of the weather seemed to exercise no influence either upon its diffusion or its symptoms, which continued to exhibit equal virulence, no matter whether it was wet or dry, warm or cold, calm or stormy. The contagion seemed to act as a more deadly poison on the individuals of some families than upon those of others, and, consequently, when one member of a family had died, there was always much reason to fear for the others when attacked. At first I thought that its greater severity in such cases could be traced to a strumous habit, but subsequent experience did not confirm

this suspicion, for the most scrofulous family I ever saw, went through the disease without a death, whereas in some others the mortality was great, although not a single indication of a strumous diathesis could be detected. Many parents lost three of their children, some four, and in one instance which came to my knowledge, five very fine children were carried off. As usual in such epidemics, the degree of intensity with which different persons were attacked varied exceedingly, some exhibiting the mildest form of scarlatina simplex, which required no treatment, and scarcely confinement to the room, while the majority were severely affected. When the disease was violent, it assumed one or other of the following forms.

First.—It at once produced not merely fever with sore throat and headach, but such violent congestion of the brain, and determination to the head, as occasioned convulsions and apoplectic coma on the first or second day. This happened to a fine young woman of robust habit in Worburgh-st., to whom I was called by my friend Dr. Brouton. She was attacked with convulsions on the second day, and died comatose on the third. In her the scarlet eruption was extremely vivid and general, a fact I notice as a proof that the congestion of internal organs was not caused by any retrocession of the eruption. In truth, as will appear hereafter, the worst cases had the most general, and most intense cutaneous efflorescence. When this tendency to the head took place in so violent a manner at the very onset, the patient was seldom saved; sometimes, however, very active measures of depletion, general and local, relieved the brain, and the case then went on favourably. This happened in a young gentleman residing in Upper Baggot-street, to whom I was called by the late Mr. Nugent, of Merrion-row. When the scarlet fever attacked a person subject to epileptic fits, the tendency to the head was increased by the epileptic habits, and the fits of convulsions at once supervened. Thus in the case of a gentleman, aged 22, who had been for several months treated by Mr. Colles and me for epilepsy, the fits commenced on the second day of scarlatina, and continued with

frightful violence until the fifth day, when they proved fatal. In a young lady residing near Black Rock, to whom I was called by Dr. Wilson, precisely the same thing occurred. She had been subject to epilepsy for many years, and when the scarlet fever commenced she was at once seized with frequently recurring fits, which, in spite of the most active measures, ended in fatal coma on the fifth day.

In the *second form* of the disease which I noticed, the symptoms were exceedingly violent and intense from the beginning, and the disease set in with the usual symptoms of severe exanthematous pyrexia, remarkable in the very commencement for the violence of the accompanying headach and spinal pains, and for the great irritability of the stomach and bowels. Indeed one of the very first symptoms in such persons was nausea, vomiting, and bowel complaint. Large quantities of recently secreted bile were thrown up, and the patient passed frequent, at first, semifluid and afterwards fluid stools, curdled green, or saffron yellow, and evidently composed of bile suddenly effused into the intestinal canal, with a copious and hurried secretion of mucus from the internal membrane of the bowels, and mixed with some true fecal matter. It was surprising what quantities were thus thrown up, and passed from the bowels by some during the first day or two of the disorder; neither the constant repetition of the nausea and vomiting, nor the abundance of the discharge from the stomach and bowels, in the slightest degree mitigated either the violence of the fever or of the headach, or seemed to prevent the full formation of the eruption. It was curious to observe that this obstinate vomiting and purging was unaccompanied by the slightest epigastric or abdominal tenderness; during its continuance the belly became fallen and soft. In fact its cause was situated not in the belly, but in the brain, a fact I did not perceive until I had had an opportunity of watching the progress of five or six such cases. It depended on cerebral irritation and congestion, and was in nature very similar to the irritability of stomach and bowels which so often accompany, and too frequently mask the progress of, acute hydrocephalus. As soon as I had become aware of the pathological relations of this vomiting and purging, I did not confine my endeavours to check these symptoms to measures intended to act directly on the stomach and bowels, such as effervescing draughts, chalk mixture, stupes, leeches to the epigastrium, &c., &c., I changed my plan of treatment, and turned my attention to the state of the cerebral circulation. Having in a former lecture referred to this topic, and having explained to you the manner in which derangement of the stomach and bowels of a properly gastric origin is to be distinguished from disorder of the digestive apparatus, originating in a sympathetic derangement of function, itself caused by a morbid condition

of the brain, and having already pointed out the importance in practice of not confounding these two states, one or other of which is so common in the commencement of violent fevers, phlegmasiæ, and exanthemata, I shall not at present dwell any longer on this subject. The second form of scarlatina was likewise remarkable for the violent excitation manifested from the very beginning in the circulating system and in the production of animal heat. The pulse at once rose to above 100, it was seldom less than 120, and in many cases, particularly in young people, it ranged from 140 to 150. I have never in any other disease witnessed so many cases of excessively rapid pulse. In general the pulse in this form was regular, but in two cases it became irregular; one was that of a gentleman living in Upper Mount-street, whom I attended along with Dr. Marsh; his pulse became intermitting and irregular on the third day, and continued to be more or less thus affected for about a week. This gentleman was attacked with subsultus, delirium, jactitation, and various nervous symptoms at a very early period, and complained constantly of his throat and head. The former was violently inflamed, and his skin was covered with a bright red eruption. On the ninth day he was seized with convulsive fits of great violence, and which returned very frequently during the night; his case appeared utterly hopeless, and yet he perfectly recovered. In a young lady, whose case is detailed by Dr. Nolan, great irregularity and intermission of the pulse commenced about the eighth day, and continued during the stage of danger; she also recovered. Of course irregularity of the pulse was in many not so much a symptom of disease as of approaching death, but then the state of the patient could not be mistaken, judging from all the other circumstances of the case. The acceleration of the pulse abated in all when an evident improvement in the general condition took place, but in few did the pulse become quite natural for many days after a favourable change, and in none did it fall to its usual standard in the course of twelve or twenty-four hours, as it not unfrequently does after the crisis of continued fevers; in fact, the scarlatina never ended with a well-defined crisis. As to the temperature of the body, I have already observed that in the cases I am now describing it was from the first considerable, and continued elevated until a very short period before death. Both the pulse and the heat of skin, however, were very easily reduced in energy by the use of the lancet or by the repeated application of leeches, and it was not uncommon to observe that even the judicious use of these means induced a general coldness of surface, very great sinking of the strength, and a faltering state of the pulse. This was remarkably the case in a young lady whom I attended along with Mr. Wilkinson, in Black Rock, and also in one of the family whose cases are related by Dr. Nolan. In

both, these effects were very obstinate and alarming, for reaction was not restored until after the lapse of more than twelve hours; both finally recovered. The pulse was sharp but not strong, and resembled the pulse of great irritation rather than that of true inflammation. The most distressing symptom at the commencement of this form of scarlatina was the sore throat; the fauces were violently inflamed, and deglutition consequently much impaired, while a general soreness was felt in the back of the head and neck; urgent headach was complained of by all, and from the second day the eyes became suffused; great restlessness, anxiety, jactitation, moaning, and interrupted raving soon made their appearance, and in many sleep was banished or utterly broken by startings and delirium before three or four days had elapsed. The eruption had now arrived at its height, which it did with great rapidity, dating from the first moment of its appearance, so that the skin, every where covered with a scarlet eruption, resembled in appearance the hue of a boiled lobster. In these violent cases the efflorescence was perfectly continuous, and never broken into spots or patches; the skin appeared as if evenly dyed with one uniform colour; the surface of the tongue was likewise much affected with the same exanthematous redness, and soon became foul, and afterwards dry and parched. The sudden drying of the tongue on the fifth or sixth day indicated in this form a rapid aggravation of the disease, and death in several cases was observed to follow this change in less than twenty-four hours, when this change was, as in a young gentleman Mr. Rumly and I attended in French-street, accompanied by a sudden acceleration of the pulse and increase of the jactitation and delirium. In this form the brain and nervous system seemed to be the parts which suffered most, and many became insensible for several hours before death; others had convulsions: when the patient survived the seventh day there was a fair chance of recovery, but many, too many, died on the fourth, fifth, or sixth days.

After I had witnessed a few examples of this form of scarlatina, I consulted with several of my friends and colleagues, and we determined to use the most active measures of depletion in the very first instance that occurred to us. A case was not long wanting. Dr. Marsh and I were engaged in prescribing for some children labouring under the epidemic, in a house in Pembroke-street, where our attention was directed to a fine boy, six years old, and hitherto perfectly healthy, who was, while we were paying our visit, attacked with the first symptoms of the complaint; we immediately resolved that as soon as the stage of rigor and collapse which preceded the febrile reaction had passed, to visit him again and act energetically, if circumstances seemed to permit it. Accordingly we came again in the course of a few hours, and found reaction

already established, attended with vomiting, purging, and headach. The sore throat, too, was much complained of, and there was great tenderness of the external fauces. We ordered relays of leeches, eight at a time, to the neck, for the purpose of relieving both the throat and brain, and we administered James's powder and calomel internally. On the next day the skin was burning in spite of a copious loss of blood from the leech-bites, the eruption vivid and already established, the pulse 140, and there had been little or no sleep. Relays of leeches were again ordered, and persevered in until considerable and lasting faintness was produced, and yet no impression seemed to be thereby made on the disease; no abatement of its virulence seemed to be the result, for the raving became more incessant on the second night, and on the third day suffusion of the eye commenced, and the tongue became parched. Shaving of the head, the most industrious application of cold to the scalp, and various other remedies were in vain applied; the pulse became weaker, the breathing quicker, the strength failed rapidly, raving and delirium gave place to insensibility and subsultus, and the patient died on the fifth day. In this case depletion was applied at once and most decidedly, for we blanched and weakened the boy by loss of blood as far as it was possible to venture, and yet the disease was not in the least degree checked, nor the symptoms even mitigated.

A fine boy, thirteen years of age, was attacked in the county of Wicklow, when he was placed under the care of a very judicious practitioner, who did not use either venesection or leeches, but relied chiefly on the exhibition of diaphoretics, particularly antimonials. The boy died on the seventh day, having suffered much from delirium, subsultus, want of sleep, &c. His brother, who was one year older, and a very strong boy, was seized with the disease in Dublin, and placed immediately under my care. I had the advantage of Mr. Rumly's assistance, and we determined to prevent the supervention of the cerebral symptoms if it were possible to do it by means of antiphlogistic treatment; we failed, and our patient died on the sixth day. In short, in this form of the disease, where the pulse, without becoming strong, *at once became extremely rapid*, bore venesection badly, and required great caution even in the application of leeches, the nervous symptoms only appeared accelerated by the system of depletion, although the heat of the skin suggested its employment. The derangement of the brain and nerves in this form depended on something more than the violence of the circulation, and originated in something altogether different from mere cerebral inflammation or congestion. What that something was I cannot even conjecture, but it was probably the result of an intense poisoning of the system by the animal miasma of the scarlet fever. Every

tissue of the body seemed, if I may use the expression, equally sick, equally overwhelmed, and it is probable that the capillary circulation in every organ was simultaneously deranged. It was not gangrene of the throat which proved fatal, for in this form it never occurred; it was not inflammation of any internal viscus, for such was not found on post-mortem examination of the fatal cases, but it was a general disease of every part. In many, another state of things, which required to be carefully distinguished from that just described existed, and the disease was evidently attended with an inflammatory state of the constitution, requiring energetic measures. In such cases the symptoms were severe in the commencement, the throat very sore, the efflorescence, however, not quite so sudden or so perfect, and the pulse never near so quick, never excessively rapid, and always strong and distinct. Such bore leeching and leeching well, and experienced from their use almost immediate alleviation of the sore-throat, headach, and restlessness, and were not much weakened by the depletion. It must be confessed that it was often exceedingly difficult to determine, *à priori*, whether the depletory system ought or ought not to be tried; where doubt existed, my custom was to try moderate leeching, and from its effects I judged of the propriety of persevering.

The disease very frequently occurred in a *third form*, more singular still than the two first, and much more insidious in its commencement. This form was evidently very common in the epidemic scarlet fever described by Withering, as cited by Dr. Tweedie. In this form the disease was ushered in by the usual symptoms of pyrexia, together with sore-throat, slight headach, and in due time, a very moderate and normal eruption. The symptoms continued moderate, the patients, after the first few days, slept tolerably well during the night, had no raving, and were quiet during the day. About the fourth or fifth day all the febrile symptoms had so far subsided, that a most accurate examination could detect nothing urgent, nothing in the slightest degree either alarming or calculated to excite the least anxiety in the patient's condition. His skin became nearly of the natural standard, his thirst diminished, and the pulse was now scarcely accelerated; a calm nearly complete, in fact, seemed to have followed the first onset of the disease; and on entering the room the physician might easily be deceived, as I myself was more than once, into the pleasing hope that all danger was past, and that perfect recovery might confidently be anticipated. This hope was, in truth, founded on such circumstances as we can usually rely on; for who would prognosticate danger where his little patient, sitting up in bed, and perhaps eating a dry crust with some appetite, had a placid countenance, and had enjoyed a night of tranquil sleep? Regular alvine evacuations, diminution of thirst,

sore throat, headach, and fever, together with the normal state of the cutaneous eruption, all conspired to confirm a favourable prognosis; and so matters proceeded, the family dismissing all apprehension as to the result, and the physician most probably discontinuing his attendance about the seventh day, in the belief that all danger was over, and that his interference was no longer necessary. Matters proceeded thus until the eighth or ninth day, when a certain degree of restlessness was observed to occur, and in the morning a slight return of fever might be noticed. Then it was that a peculiar train of symptoms set in. The nostrils assumed a sore and irritated appearance about the edge of the alæ, and a serous moisture began to flow from their internal cavities. Sore throat was again complained of, the skin became hot, great debility and prostration of strength came on suddenly, a painful tumefaction commenced in the region of the parotids and submaxillary glands. This tumefaction increased rapidly, becoming every day harder, more elevated, diffused, and exceedingly tender, but without much redness. In the course of a few days it surrounded the neck like a collar, and being attended with swelling of the face, the poor little patient's countenance was sadly disfigured. In the meantime the discharge from the nose had increased considerably, and become more viscid and fetid; the internal membrane lining the nasal passages was affected throughout, its entire surface everywhere inflamed and tumefied, so that a snuffling sound was produced when the patient breathed through his nose; at length the discharge increased to such a degree, that the nostrils became completely impervious to the air in breathing. The state of the throat generally began to alter for the worse at the very commencement of this change; and a similar inflammation, attended with an ill-conditioned secretion of lymph and fluid, occupied the entire surface of the mouth and tongue, and at last spread deep into the pharynx. While this was going on, the fever freshly lit up at once exhibited the most decided symptoms of the worst form of typhus, and subsultus, constant muttering, raving, anxiety, want of sleep, restlessness, moaning mingled with an occasional screech, reminding one of that which is so ominous in hydrocephalus. Great difficulty was now experienced in swallowing, and the drink was frequently spurted out of the mouth after a vain attempt at deglutition. Matters now proceeded rapidly from bad to worse, and at last, after much suffering, death closed the scene, being preceded for many hours by a state of extreme restlessness, during which it was impossible to determine whether the patient was still sensible. The swelling of the neck went on increasing to the last, but seldom exhibited any tendency to point: it continued, on the contrary, everywhere hard, or at most became indistinctly softened, or, to use a technical phrase, "boggy." When cut into, no matter was found; blood, serum, and a diffused cel-

lular slough, not separated from the living tissues, were observed on making the incision.

I shall conclude these remarks on scarlatina, gentlemen, by reading you a letter I received on the subject from Mr. Ferrall. His observations are extremely valuable, more especially those which are made towards the termination of the letter, where he describes a most important sequela of scarlatina not hitherto mentioned by any writer.

“MY DEAR SIR,

“In reply to your letter, I have the pleasure to send you a few brief notes of my experience of the scarlatina of last autumn and winter.

“Of seventeen cases of which I possess notes, four occurred in adults, three in children under four years of age, and the remainder at different ages between the latter and fourteen or fifteen years. I seldom saw the cases in the commencement. The mode of attack was occasionally similar to that of common sore-throat, followed by rigors. Sometimes violent pyrexia and shiverings, with intolerable headach, and even delirium preceded the other signs. In some few cases the efflorescence first attracted notice, the fever in these instances being throughout so mild as scarcely to demand attention.

“The progress of the disease was various, but usually bore a relation to the character of the incipient fever. In general the fever increased in intensity as the disease advanced, or as new parts became engaged, but this was not always the case. In two instances which I saw in a state of great vital depression on the third or fourth day, I was assured that the early fever was very high, although it had passed rapidly into the typhoid state.

“The danger sometimes appeared to arise from the condition of the entire system, sometimes from that of important parts. Of two cases which I saw when dying, one was sinking like a person in typhus fever; the other, a boy thirteen years old, was moribund in the coma which succeeded to violent phrenitic delirium. The latter case was remarkable in this, that the phrenitic state occurred while the eruption was in its prime, the whole body retaining its deep scarlet colour until a short time before his death. The disease in this instance set in with delirium, which had been subdued, I have reason to believe, by the most active means. Death occurred in one instance from croup, the disease of the throat having passed into the trachea and bronchial tubes. In another, sloughing of the fauces, with low fever, carried off the patient on the sixth day.

“In several, who ultimately recovered, life was seriously endangered by local inflammatory attacks. In one instance, a girl about seven years old, enteritic symptoms sprang up suddenly while the patient was in a very weak state, and were with difficulty subdued. In another, a boy ten years old, acute pain in the region of the heart occurred when the eruption was on the decline; it was accompanied by

short cough, palpitations, dyspnoea, rapid, though not irregular, pulse, and sudden accession of fever. There was no perceptible *sputement*, but the action of the heart was violent, and there was acute pain on pressure. It yielded to leeching, followed by calomel with James's powder till the gums were slightly touched.

“Another patient, a girl twelve years old, narrowly escaped the effects of sloughing of the throat. Croup occurred in two instances, in which, notwithstanding the opinions of M. Trousseau, I could not doubt its origin in scarlatina. It happened, no doubt, in cases which had exhibited the diphtheritic patches, without much surrounding inflammation on the tonsils, but the eruption was sufficiently marked to remove all obscurity. One child who recovered ejected the false membrane (which I still preserve) in a tubular form, and presenting a cast of the trachea a little beyond its bifurcation. In the child before mentioned, who died, patches of false membrane were also ejected, but she sank exhausted, and the disease was afterwards discovered to have extended far into the bronchial ramifications.

Although the treatment was generally antiphlogistic, this plan was not always applicable, even in the commencement of the disease. In all instances which I had an opportunity of observing, it was necessary to watch the effects of local bleeding. It was easy to pass the boundary of relief, and then, most difficult to repair the loss and meet the symptoms of exhaustion when they had actually set in. Wine and diffusible stimuli were often required from this cause alone, even when the cases had nothing of the malignant or typhoid character in their nature.

“Tepid sponging appeared in many instances preferable to cold, and I think the soothing effects were of longer duration. Reaction and the distressing sense of burning heat did not appear to recur so soon as when cold fluids were employed. Purgatives, except of the mildest kind, were not well borne, but cooling diuretics were clearly indicated, and when persevered in, had, in many cases, the apparent effect of anticipating the sequelae of the complaint.

“The ulcerations and sloughings of the throat were treated by nitrate of silver, alum, and the chlorides, according to their states. But none of these applications were to be depended on, when the colour of the fauces was intensely red, unless a few leeches had been previously applied. In one gentleman, 28 years of age, free leeching externally (to the number of 40) failed in removing the sense of suffocation or enabling him to swallow. A few leeches applied to the inside of the nostrils was followed by copious bleeding and immediate relief. The latter expedient was indicated by the tumid state of the velum and pituitary membrane, the stertorous breathing, and complete occlusion of the nares.

“Its mode of spreading in families was un-

certain. It sometimes attacked children within a few days of each other; at other times a fortnight has elapsed before I was again requested to see a new patient. Some children escaped the disease altogether.

"Among the sequelæ which I had occasion to see, diarrhœa occurred in two or three instances, chronic bronchitis in one, and anasarca in four. The urine was slightly albuminous in two of the latter cases before the face and limbs began to swell; in the other two it exhibited this character when the disease was formed, but I did not see them previously. The treatment of the anasarca was antiphlogistic and diuretic, and succeeded in restoring three to perfect health; the fourth still remains an invalid, but not from this cause; the apex of the right lung affords evidence of tubercular disease.

"I have now to mention a peculiar affection of the neck, which I have not before seen in connexion with scarlatina, but of which four cases have occurred during my observation of the epidemic in question.

"CASE I.—About the beginning of August 1834, I was requested by my friend Dr. Davy to see a young girl, ten years old, in Upper Baggot-street. Her convalescence was tedious, some degree of fever still existing at the end of six weeks from the commencement of the attack. But her principal complaint was severe pain of the right side of the neck, close to the head, and extending as high as the vertex on the least motion of the part. She could not raise the head from the pillow without putting a hand at each side for its support, and when taken out of bed, instinctively sought a resting-place for the chin. The face was awry, its vertical diameter passing from above downwards, and from right to left. Posteriorly the upper cervical vertebræ were curved, the convexity of the curve being situated a little to the left of the middle line; there was considerable swelling of the soft parts covering the bones. Pressure here was intolerable, and the least attempt to rotate the head occasioned severe pain. Deglutition was now tolerably easy, but there had been considerable difficulty of swallowing during the early period of the complaint. There was here obviously a carious state of the articulation of the atlas and dentata, and we did not expect to remove the curvature. Perfect rest was, however, enjoined, and the usual remedies employed with a view to arrest the further progress of the disease. She gradually recovered her health, and is now lively and well grown, but the curvature is permanent.

"CASE II.—Early in August, 1834, Mary Inglesby, of Russell-place, æt. 7, was sent to me by Mr. Long, of Summer Hill. She was confined to bed in scarlatina for a fortnight. At the end of this time she was taken out of bed, and then the head was observed to be turned to one side. It was now five weeks

altogether from the beginning of the disease, and the parts were still in the same state. The face was awry. She complained of pain in the concavity of the curve and that side of the head, and could not bear the slightest motion or shock. Leeches were prescribed, and calomel given afterwards in doses of a grain three times a-day till the gums were touched. As soon as this effect was produced the pain subsided, and the head gradually acquired its natural position. Her recovery was complete.

"CASE III.—A younger brother of Mary Inglesby was subsequently under the care of Mr. Long for scarlatina. The same state of the head and neck were detected on the 13th day, and treated by Mr. Long on the same plan as that adopted in the former case. The pain disappeared as soon as the mouth was made sore, and the position of the head became natural. He is now in good health.

"CASE IV.—I met Mr. Edgar, of Arran Quay, in February last, in the case of a young gentleman about six years old, whose convalescence from scarlatina was tedious, and in whom the difficulty of swallowing persisted after the redness of the fauces was removed. On taking him out of bed it was remarked that he was quite unable to keep the head erect. The symptoms were similar to those of the two last cases, but in a milder degree. A few leeches were applied, and evaporating lotions instantly used to the part on account of considerable local heat. The leeching was repeated in a day or two, but as the symptoms yielded rapidly, and as he had some tendency to diarrhœa, calomel was not employed. In about a fortnight the natural position of the head and neck was restored.

"I can offer no better explanation of the occurrence of this affection during the progress of scarlatina than by supposing that the inflammation of the fauces and back of the pharynx was propagated to the covering of the spine, and thence more or less deeply to the adjoining parts. In all those cases there had been marked and prolonged difficulty of deglutition as a symptom of the disease; and it is to this circumstance I am desirous of calling attention, as affording an index for a careful review of the condition of the spine during the period of convalescence. Should a child be observed to lie more on one side than the other, and evince an unwillingness to be disturbed, it would be an additional reason for suspecting a tendency to this complaint.

"Believe me, dear Sir,
"Yours, very truly,
"JOSEPH M. FERRALL."

"Rutland-square, West,
"May 30th, 1835."

LECTURES
ON
MIDWIFERY & THE DISEASES
OF WOMEN AND CHILDREN,

BY EDWARD RIGBY, M.D., F.L.S.,

ASSISTANT PHYSICIAN-ACCOCHEUR TO THE
GENERAL LYING-IN HOSPITAL.

Delivered at St. Thomas's Hospital.

LECTURE XXXIX.

Puerperal Mania.

GENTLEMEN—There still remain two other subjects with which I think it necessary to occupy your attention before I conclude this part of my course, viz. *Puerperal Mania* and *Phlegmasia dolens*. They are both diseases of great importance, which have been till lately but imperfectly understood, and about which, especially the latter, there has been a considerable discrepancy of opinion.

Puerperal mania is a disease which may not only attack a female during any stage of pregnancy or labour, but may make its appearance at some considerable interval afterwards, whilst suckling her child. The experienced Dr. Gooch, whose admirable observations on puerperal mania have not only placed this formidable disease in a much clearer point of view than it was before, but also furnished us with sound data to direct our practice by, has pointed out two periods at which the mind is peculiarly liable to become disordered, "the one soon after delivery, when the body is sustaining the effects of labour, and the other several months afterwards, when the body is sustaining the effects of nursing."

Disorder of the mind in females at this period, like the epileptic puerperal convulsions, may occur under very different forms and circumstances, requiring treatment as different as the causes are opposite. It may occur in a maniacal form, with symptoms of strong cerebral congestion, in fact, with little more or less than inflammation of the brain or its membranes, or it may appear as melancholia, with a totally opposite condition of the system, viz. anæmia, where the patient has been exhausted by labour, hæmorrhage, suckling, &c.

You will perhaps recollect the description which I gave you, when speaking of menorrhagia at the beginning of this course, of those symptoms of anæmia which are present during the intervals of the attacks. Besides the intense headach, the weariness and inability of exertion, the restless nights, the depressed spirits, &c. &c., I mentioned that the mental powers soon begin to suffer in this state of general exhaustion. She experiences strange associations of ideas, which she cannot account for; their repetition alarms her; she feels convinced that her mind is wrong, and that if it goes on so, she shall become deranged. Now this is precisely the same state with the melancholic form of the disease I am now describing: it

corresponds to the *epilepsia ex anæmia* of puerperal women: the delirium tremens of drunkards is a modification of the same state: it is a state (as Dr. Gooch has most happily expressed himself) of excitement without power. "I have repeatedly seen," says this experienced observer, "the commencement of mental derangement in women who had recovered from their confinement, and had been suckling several months. Nearly all these were cases, not of mania, but of melancholia. They occurred in women who had been debilitated by nursing. The disease at this period has been attributed to weaning; but, in all the cases I have seen, the disease has begun before weaning, and this measure has been resorted to because the patient had neither milk nor strength to fit her for a nurse. There was a peculiarity about the disease at the commencement, which I have seldom or never noticed at the commencement of mania. There was an incipient stage in it, in which the mind was wrong, yet right enough to recognise that it was wrong." This intermediate state of things between actual health and the outbreaking of the disease is not difficult to detect, if the patient be carefully watched. There is a restless fidgetting way about her which is not usual; she worries herself about trifles, either for no reason at all, or to a much greater degree than the nature of the thing would warrant; there is an incessant talkativeness and pertinacious wrong headedness of opinion, against which argument or reasoning is of no avail, but rather aggravates; her attendants and nearest friends are almost sure to fall under some groundless suspicion—they are robbing her, and she must be ruined, &c. &c. With all this there is constant sleeplessness, or at least very disturbed rest; the pulse is seldom very quick, but always weak; she takes little food; her hallucinations increase; and not unfrequently the first decided manifestation of the disorder is her becoming very turbulent, or even attempting to jump out of bed.

There is a considerable difference in these two forms of the disease, which greatly increases the importance of your making an accurate distinction between them. The maniacal form, which is accompanied with symptoms of meningeal and cerebral inflammation, generally terminates fatally, whereas, in the other, or melancholic species, where such an opposite state exists, and which is much more common, the patients, if treated properly, generally recover. Dr. Gooch has quoted a very remarkable passage from the MS. Lectures of Dr. W. Hunter, which is well worth being recollected:—"Mania (says Dr. Hunter) is not an uncommon appearance in the course of the month, but of that species from which they generally recover: when out of their senses with fever like paraphrenitis, they will in all probability die, but when without fever it is not fatal." "From this (says Dr. Gooch) I extract the following meaning—that there are

two forms of puerperal mania; the one attended by fever, or at least the most important part of it, a rapid pulse; the other accompanied by a very moderate disturbance of the circulation; that the latter cases are by far the most numerous—that the former generally die. There are some other circumstances to be taken into the account of the prognosis, the form of the derangement, and the period at which it occurs. Mania soon after delivery is more dangerous to life than melancholia beginning several months afterwards. Nights passed in sleep, a pulse slower and firmer, even although the mind continue disordered, promise safety to life. On the contrary, incessant sleeplessness, a quick weak fluttering pulse, and all the symptoms of increasing exhaustion, portend a fatal termination, even though the condition of mind may be apparently improved. In the cases which I have seen terminate fatally, the patient has died with symptoms of exhaustion, not with those of oppressed brain, excepting only one case. But, supposing the patient to live, how long will the disease last, and what danger is there of its becoming permanent? Experience shows that mania is a less durable disease than melancholia: it is more dangerous to life, but less dangerous to reason." "Of the many patients (says Dr. Gooch) about whom I have been consulted, I know only two who are still, after many years, disordered in mind, and of these one had already been so before her marriage. Before leaving this part of the subject, there is still another question, which requires to be thought of, and that is, whether a patient who has been disordered in mind after one lying-in, is likely to be so after another? I believe the chances are much against it: there is a sufficient possibility of such an event to call for the utmost degree of care, not only in the next, but in subsequent confinements; but this care being taken, the proportion of cases in which the disease occurs twice is small."

The causes of puerperal mania are as different as its species; like puerperal epilepsy, like the convulsions of infants, or the chorea of children, it may be merely a symptom of irritation in some part of the system acting indirectly upon the brain. Thus, then, you will easily perceive that a disorder of the mind may arise from the irritation produced by the presence of the child in the uterus or passages, or a state of irritation thus produced remaining after its birth. Under such circumstances, the attack will mostly assume the maniacal phrenitic character; the face is flushed, the head is hot, the carotids throb, the eyes are wild, and the pulse hard and full. This form, as Dr. Gooch remarks, rarely comes on after labour, for when the cause (*viz.* the child) is removed, the disease mostly disappears of itself also. I have only observed it shortly before or during labour, and should imagine that it can only exist *after* labour where actual inflammation of the brain or its membranes

has been established, a state, of course, of the utmost danger.

Where the state of cerebral excitement arises from a deranged condition of the alimentary canal, we do not generally see it accompanied with symptoms of an inflammatory character. The cause here seems rather to depress the powers of the system than excite them, and consequently we mostly have a state of disordered mind where the patient is inclined to be violent, but where the tongue, though foul, is moist, where there is little flushing of the face, and where the pulse betrays but little excitement of the vascular system; on the other hand, the breath is offensive, the tongue, as I before said, is foul, the bowels rather constipated, and the evacuations, when passed, very unhealthy.

The other causes of puerperal mania are those which do not act by indirect irritation, but by directly exhausting the powers of life; as, for instance, where the patient has been rendered almost ex-sanguineous by profuse uterine hæmorrhage, or where she has continued to suckle her child when her strength and health have not justified the attempt—where she has become pale and leucophlegmatic, and where the various effects of anæmia upon the mind have gradually made their appearance.

Puerperal mania was formerly supposed to be a common result of weaning. The idea was, that a secretion which had been established, and to which the system had adapted itself, being suddenly stopped, congestion to the head had followed; or, in other words, that the usual form of disordered mind in puerperal women was a state of inflammatory mania, induced by the suppression of the milk. Now this is a form which I have never seen, and Dr. Gooch, with his large experience, gives the same result. "In all the cases which I have seen (says this eminent practitioner) months after delivery, the weaning has been the consequence of the disease, not the disease the consequence of the weaning. The patients had been reduced in health by nursing, their memories had become enfeebled, their spirits depressed, and their minds ultimately disordered; and they were directed to wean their children, because they had neither milk nor strength to enable them to nurse."

With regard to the line of treatment which you must adopt in the inflammatory form of puerperal mania, I need scarcely tell you that it will be precisely the same as in the common form of puerperal convulsions. The lancet must be used boldly and decidedly, and it is remarkable what a quantity of blood may be abstracted under these circumstances, not only without injury, but with evident advantage to the patient. The bowels must be opened by a smart cathartic, cold applied to the shaven scalp, sinapisms to the legs and feet, in short, nearly the same practice as would be adopted in cases of violent congestion to the head under other circumstances. Time is here of

great consequence, gentlemen; you *must* act with promptness and decision; the labour is advancing, every five minutes makes a perceptible difference in her manner, and if there be any delay permitted, she will surely have a convulsion fit, or even a stroke of apoplexy.

Previous injuries of the head evidently render the patient peculiarly liable to some cerebral affection at this period. I have seen three cases of mania or convulsions, where the patient had received severe blows on the head some time previously. I mention it merely to show that the knowledge of such a circumstance having occurred should put you on your guard, and induce you to watch your patient more narrowly than perhaps you otherwise would have done. In cases of mania coming on during labour, where the patient is of a delicate habit of body, do not be *too* active with your lancet, not only because in most cases, after a certain quantity of blood has been lost, the symptoms will now yield to the action of other remedies, particularly purgatives, but also because if you carry the bleeding beyond its proper limits, you will run a risk of keeping up the disordered state of the mind, from a very opposite condition of the system.

The symptoms of a deranged state of the alimentary canal vary considerably in degree in different cases of puerperal mania; "in some," as Dr. Gooch observes, "they are scarcely perceptible, in others they exist in a most remarkable degree; in these latter cases they seem to be the link on which the disease hangs, for as soon as they are removed the patient is well." I shall merely quote one case from Dr. Gooch's work, and hope that by so doing you will be induced to peruse the rest. The observations which it contains on puerperal mania are by far the best, either in this or in any other language, which have yet appeared. "A lady, twenty-two years of age, clever, susceptible, and given to books, was confined with her first child; she was anxious to nurse, but, several days passing with little appearance of milk, doubts began to be entertained whether she would be able; she thought she would, her nurse and surgeon thought that she would not; this led to irritating discussions, her manner became sharp, quick, and unnatural, and at the end of a few days she was decidedly maniacal. I and another physician were sent for; we found her in a strait waistcoat, incessantly talking or reciting poetry; her skin was hot, her pulse full and much above 100, her tongue covered with a dark thick fur, her bowels were confined, and her stools excessively dark and offensive. She took a dose of calomel and jalap, followed by small doses of sulphate of magnesia. These produced a few evacuations, but they were followed by no relief. She talked almost incessantly, scarcely ever slept, and was so violent that it was impossible to keep her in bed without the strait waistcoat. Thus three days passed from our first consultation. The phy-

sician who attended with me, thinking the case would be protracted, withdrew, and I was directed to take Dr. Sutherland down with me. As the purgative had operated very moderately, and the tongue and stools were as unnatural as at first, he proposed a more active purge. The next morning, therefore, she took a strong dose of senna and salts, made still more active by the addition of tincture of jalap. After this had been taken about three hours it procured a very large evacuation, nearly black and horribly offensive. This was, as usual, discharged into the bed without any notice on the part of the patient; it acted again an hour or two afterwards, but now the nurse, who was sitting by the bed-side, was surprised to see her turn round, and, in a calm and natural manner, request to be taken up, as her medicine was about to operate; her waistcoat was immediately loosened, and she was taken out of bed, when she voided a stool of prodigious size, as dark and offensive as the first, and then walked back to her bed calm and collected. We saw her not many hours afterwards; her waistcoat was off, she was lying on her sofa perfectly tranquil; answered questions correctly, manifested no vestige of her complaint, excepting some strangeness in the expression of her countenance, and a timidity and abstinence from conversation, which was not natural to her. She recovered rapidly and uninterruptedly."

I have quoted this interesting case, in order that you might have a clear view, not only of the symptoms, but also of the treatment of puerperal mania under the above circumstances, and from what I said on this subject, when speaking of puerperal convulsions, there is no need for dwelling any longer upon it.

The treatment of disordered mind from exhaustion, whether this arise from hæmorrhage, suckling, &c., requires more consideration. The state of the bowels should of course be attended to, but purging must be by all means avoided. In this state of prostration there is a great disposition to diarrhœa, even from the mildest laxatives, and we should then depress the powers of life still further. "Cupping, low diet, and purging," as Dr. Gooch well observes, "would confirm her disease, and perhaps convert it into idiotism." In no disease has want of discrimination been more mischievous than here; because emetics have been found to be serviceable where it arises from deranged stomach and bowels, they have been administered in the other form also, where it arises from anæmia, and with the most unfortunate result: the disorder of the mind has continued, and the patient has gradually sunk from exhaustion. It is here that narcotics prove of such inestimable value; combined with gentle diffusible stimuli, they rouse the flagging powers of life, and calm the state of excitement and general irritability, both of body and mind, which is present; by their means can we bring again to our harassed and exhausted patient, "Nature's sweet

restorer"—sleep, converting nights of incessant raving into hours of refreshing rest. The combination of hyosciamus and camphor, which I mentioned to you in the treatment of puerperal convulsions from anæmia, is a most valuable remedy. Battley's liq. opii sedativus in mist. camphoræ, given every two hours until sleep follows, is also very useful. The Dover's powder here is not so desirable, especially in summer time, on account of its diaphoretic action. If she be still suckling, this must be instantly discontinued, and either a wet nurse procured or the child weaned; her diet must be bland and nutritious; the powers of the stomach must be kept up with small doses of quinine and sulphuric acid with some aromatic; she should be allowed plenty of milk, good veal broth, beef tea, meat, jellies, &c., at short intervals during the twenty-four hours, and, where necessary, three or four ounces of port wine. In extreme cases I have found the emulsion of egg and brandy very serviceable, especially where the stomach has been weak and irritable. Before quitting this subject, let me again request you to read Dr. Gooch's observations upon it; you will find them not only very valuable, but exceedingly interesting, from the agreeable manner with which he has illustrated them by cases.

The last subject in this division of my course, and with which I shall close the present lecture, is *phlegmasia dolens*, a disease which has been chiefly observed to affect women in the puerperal state; in a few instances it has been observed to attack pregnant women, and in one or two cases nurses on losing their children have been affected by it. Women of all descriptions are liable to be attacked by it during or soon after childbed. It has rarely occurred oftener than once to the same female; it supervenes to easy and natural as well as to difficult and pretermatural births; it sometimes makes its appearance in twenty-four or forty-eight hours after delivery, and at other times not till a month or six weeks after; in general, the attack takes place from the tenth to the sixteenth day of lying-in. It has, in many instances, attacked women who were recovering from the puerperal fever, and has occasionally been observed in malignant diseases of the uterus in the unimpregnated state.

The complaint generally takes place on one side only at first, and the part where it commences is various, but it most commonly begins in the lumbar hypogastric or inguinal region on one side, or in the hip or top of the thigh, or corresponding labium pudendi. In this case the patient first perceives a sense of pain, weight, and stiffness in some of the above-mentioned parts, which are increased by every attempt to move the pelvis or lower limb. If the part be carefully examined, it is generally found fuller or hotter than natural, and tender to the touch, but not discoloured; the pain increases, always becomes very severe, and in some cases is of the most excruciating kind;

it extends along the thigh, and, when it has subsisted for some time longer or shorter in different patients, the top of the thigh and labium pudendi become greatly swollen, and the pain is then sometimes alleviated, but accompanied with a greater sense of distension. The pain next extends down to the knee, and is generally the most severe on the inside and back of the thigh in the direction of the large veins, which may be frequently felt rolling under the finger like hard cords, and exactly in the direction of these will be the most intense pain created by the slightest pressure. The pain then extends down the leg to the foot, following the same course, and, after some time, the parts last attacked begin to swell, and the pain abates in violence; still, however, it is very considerable, especially on any attempt to move the limb. The extremity being now swelled throughout its whole extent, appears perfectly or nearly uniform, and is not perceptibly diminished by the horizontal posture, like an œdematous limb; it is of the natural colour, or even whiter, is hotter than natural, excessively tense, and exquisitely tender when touched; when pressed in different parts by the finger it is found to be elastic, little if any impression remaining, and that only for a very short time. If a puncture or incision be made into the limb, in some instances no fluid is discharged, in others a small quantity only, which issues out, and coagulates soon after, and in others a larger quantity escapes, which does not coagulate, but the whole of the effused matter cannot be drawn off in this way. The swelling of the limb varies both in degree and in the space of time requisite for its full formation; in most instances, it arrives at double the natural size, and in some cases at a much greater. In lax habits, and in patients whose legs have been very much affected with anasarca during pregnancy, the swelling takes place more rapidly than in those who are differently circumstanced. It sometimes arrives, in the former class of patients, at its greatest extent in twenty-four hours, or less, from the first attack*.

A great variety of opinion has prevailed respecting the nature of this disease. Previous to the publication of the memoirs of M. Bouillaud, Dr. Davis, and M. Velpeau, various hypotheses had been advanced respecting the proximate cause of this disease, but they were mere speculations, unsupported by facts, and inadequate to account for the phenomena. The cases and dissections related by these authors first threw light on the real nature of the complaint, and showed that it generally consisted in an inflammation of the trunks and principal branches of the veins of the lower extremities. By reading to you the following case, which has been published by Dr. Lee in his valuable paper on this subject, I think that I shall give you a clearer view of the

* Hull.

course and treatment of the disease, and impress it more firmly on your minds.

"15th day after delivery.—When I first saw her (says Dr. Lee) the whole extremity was much swollen, the intumescence being greatest in the ham and calf of the leg. The integuments wore a uniform smooth shining appearance, having a cream-like colour, and every where pitting upon pressure, but more readily in some situations than in others. The temperature to the touch did not differ from that of the other limb, though she complained of a disagreeable sensation of heat throughout its whole extent, and much pain was experienced in the upper and inner part of the thigh on moving it. Immediately below Poupart's ligament, in the situation of the femoral vein, a thick, hard cord, about the size of the little finger, was distinctly felt. This cord, which rolled under the fingers, and was exquisitely sensible, could be distinctly traced three or four inches down the thigh, in the course of the femoral vessels, and great pain was experienced on pressure, as low down as the middle of the thigh in the same direction. The pulsations of the femoral artery were felt in the usual situation below Poupart's ligament; pressure over this vessel excited little or no uneasiness. Pulse 90, and sharp; tongue much furred; thirst urgent; bowels confined; the lochial discharge had nearly disappeared. Leeches were applied to the left groin and upper and inner part of the thigh; these were followed by cold lotions to the affected part, and mild cathartics and anodynes were administered internally. Five days afterwards the acute pain on pressure and motion of the limb had subsided, and the extremity was universally œdematous. For two months after this period the limb remained so feeble as to disable her from walking, and continued larger than the other. Eleven months after the attack, the general health of the patient was restored, and she again became pregnant; she was delivered of a still-born child, and died soon after from uterine hæmorrhage. The whole of the left inferior extremity was considerably larger than the right, but no serous fluid escaped from the incisions made through the integuments, beneath which a thick layer of peculiarly dense granular adipose matter was observed. The common external iliac and femoral veins and arteries enclosed in their sheath were removed from the body for examination. The common iliac with its sub-divisions, and the upper part of the femoral veins so resembled a ligamentous cord, that, on opening the sheath, the vessel was not, until dissected out, distinguishable from the cellular substance surrounding it. On laying open the middle portion of the vein, a firm thin layer of ash-coloured lymph was found in some places, adhering close to, and uniting, its sides, and, in others, clogging it up, but not distending it. On tracing upwards the obliterated vein, that portion which lies above Poupart's ligament was observed

to become gradually smaller, so that in the situation of the common iliac it was lost in the surrounding cellular membranes, and no traces of its entrance into the vena cava were discernible; the vena cava itself was in its natural state. The entrance of the internal iliac was completely closed, and in the small portion of it which I had an opportunity (says Dr. Lee) of examining, the inner surface was coated by an adventitious membrane. The lower end of the removed vein was permeable, but its coats were much more dense than natural, and the inner coat was lined with a strong membrane, which diminished considerably its calibre, and here and there fine bands of the same substance ran from one side of the vessel to the other. The other coat had formed strong adhesions with the artery and the common sheath. The inguinal glands adhered firmly to the veins, but were otherwise in a healthy condition*."

The question is, what are the exciting causes of this disease, and in what way is it connected with parturition? There is little or no reason to suppose that the adjacent veins can be exposed to sufficient irritation to become inflamed by the actual process of labour, but from what I have already mentioned to you, there is reason to suppose that they might become inflamed in the same manner, and from the same causes, as in that form of puerperal fever which I have in my last lecture described to you. It sometimes, however, occurs quite independent of venous inflammation. I had lately a case of puerperal fever with phlegmasia dolens: the patient died. On examination of the iliac veins, no inflammation could be perceived, although they were carefully examined, but the inflammation of the uterus had spread to the adjacent cellular tissue. That portion of it which is called the fascia cribriformis, on the upper part of the thigh, was much inflamed, and the numerous absorbents which penetrate it were glued together and impervious.

Phlegmasia dolens is not an affection peculiar to the puerperal state, for it is occasionally observed at other times, where a similar source of irritation in the uterus had existed. You will find a very interesting case recorded in the Medico Chirurgical Transactions by Mr. Lawrence, of a woman who was suffering under carcinoma uteri, where phlegmasia dolens made its appearance, and where the same changes were found after death as mentioned by Dr. Lee in the case just quoted. I have had two similar cases myself, where phlegmasia dolens supervened to carcinoma uteri. When you call to mind the offensive discharges in this horrible malady, you may easily imagine that mischief may easily result by their stagnating in the uterus, thus causing inflammation of the veins spreading to the large iliac trunks. On mentioning these views to my friend Dr. H. Ley, he confirmed them by

* Med. Chir. Trans.

observing that he had never seen phlegmasia dolens appear in cases of carcinoma uteri, until the patient, either from the progress of the disease, or some other cause, was confined to the horizontal posture. At my next lecture, gentlemen, I shall commence the diseases of children.

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**OBSERVATIONS ON THE TOXIC
EFFECTS OF BELLADONNA.**

BY GAULTIER DE CLAUBRY, D. M. P.

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POISONING by the preparations of belladonna must occur very rarely, since it presupposes either an error in the quantity prescribed by the physician, or a *qui pro quo* committed in the dispensary of the druggist, or, what would happen still more rarely, the use of this medicine by a person for whom it was not intended.

It may be in the recollection of many, that the dread of the cholera, and its fearful invasion in the year 1832, singularly multiplied the number of recipes which every one was recommending as prophylactic against cholera; among these, the infusion of the *Menyanthes trifoliatum* (common buck-bean) was strongly advised by several individuals as a certain preservative. At this period a sexagenarian, of delicate health, and his two daughters, who were approaching their thirtieth year, were accustomed to take a cupful of this infusion two or three times a-day, and had done so for some time.

One morning in July, about the time when this epidemic again appeared, I was summoned to see the father, who was said to be suffering from determination of blood to the head. On entering the house I was struck with the peculiar expression of countenance of the younger of the ladies; there was an appearance of dulness, uncertainty, and vacuity in her look; it was not altogether that of a person affected with amaurosis, but it resembled it very much; there was also a kind of peculiar smile, which gave a curious expression to the features. It seemed also to me that the voice was somewhat changed, and that her walk was rather vacillating and unassured. My attention was now directed to the father, to visit whom I had been sent for, and whom I found in bed.

The old man's countenance, habitually affected with gutta serena, was of a purple colour, the conjunctiva injected with bluish blood, the pupils dilated and immoveable, the eyes without expression; the lips, tongue, and lining membrane of the throat were dry; he suffered from great drought, and complained of a sensation of constriction of the pharynx; the speech was embarrassed, the phrases incomplete, scarcely intelligible; the skin was hot and dry, the pulse full, and sufficiently developed, but rather slow.

I was informed that his daughters, surprised at his sleeping so late that morning,

went to his bedside about eight o'clock, and having awakened him, found him apparently confused, and with embarrassed speech, and that, having caused him to rise, he could not keep himself upright, but complained of vertigo, and that everything was turning round with him, &c. I now tried to make M. F**** sit up in bed, but soon ascertained that he could not, and that he was exactly like a man who had taken a large quantity of wine; the expression of his countenance presented in the very highest degree the singular aspect which had slightly attracted my attention in the daughter. But my astonishment was increased when the elder sister, entering at the moment, exhibited the same phenomena as her sister in a more marked degree. Difficulty of standing upright, uncertain gait, an air of astonishment and hebetude, the eye inanimate, speech difficult, tongue, lips, and mouth dry, unwonted loquacity, an almost idiotic laugh, or smile without motive, a train of symptoms almost sufficient to justify the exclamation which escaped me, "God forgive me! you've all been drinking!" The three, in fact, presented considerable analogy in their present condition with the symptoms which occur the day after a certain degree of intoxication, or rather with those of persons incompletely asphyxiated by the vapours of burning charcoal. I had soon reason to believe that wine had nothing to do with the production of the singular phenomena which I had noticed, and the perfect similarity of symptoms in these three persons at the same time, induced me to form the opinion that some toxic substance had produced this singular condition.

I was then informed that the family had, the previous evening, taken some cupfuls of an infusion of the *Menyanthes trifoliatum*, as they had often done during the first invasion of the cholera, and on awaking in the morning they had found themselves in the condition just described. Not being able to attribute such effects to the innocent *menyanthes*, I required to see the plants which had been employed, and my surprise was considerable when, instead of the *Menyanthes trifoliatum*, a packet was presented to me containing the stalks and leaves, dry, faded, and badly preserved, falling partly into powder, of a plant which at first I did not recognise, but which certainly was not that whose name it bore. I then ascertained that the quantity of the plant which had been obtained of a well-known herbalist residing in their neighbourhood, and which had been used daily in the form of infusion during the first invasion of cholera, being exhausted, the younger of the ladies went to a shopkeeper's at a distance, where she purchased a handful of a plant which was furnished to her on her asking for the *menyanthes*. I have already remarked that the plant thus supplied her was badly preserved, dry, and evidently of old date. Madlle. F. perceived at once that it differed mate-

rially from the herb which she had procured from the first herbalist, and made the remark to the shopkeeper, who assured her that it really was the buckbean, and showed her the name upon the drawer. The cholera was then disappearing, and the preservative was locked up until about the middle of July, when the return of the epidemic induced the family again to have recourse to a remedy which had already proved so salutary. The younger sister made a weak infusion, and drank one or two cupfuls a few hours after dinner, as did also her sister, and they induced their father to take even a larger quantity, as they had not any suspicion of the toxic nature of the plant they had employed. When, the next day, they found their father in the condition already described, they became alarmed, and dreaded a determination of blood to the head. They were, however, surprised at the singular condition to which they were themselves reduced; and when I had demonstrated to them the similarity of the exciting cause, the essentially intoxicating cause, by the perfect resemblance of the symptoms under which themselves and father laboured, they recollected the following circumstance, which became an additional proof of what I had advanced. They stated that, a few days previously, they had each taken a cupful of this infusion, and their father had had two, after which they felt inclined to sleep earlier than usual, and the light of the candle was painful; they slept very soundly, but the next day they suffered from giddiness.

There were now two indications to be fulfilled,—the one to ascertain the nature of the plant which had been used in making the infusion, and which certainly was not the buckbean, the other to endeavour to remove the symptoms of poisoning, which fortunately were but slight. Everything induced me to believe that the poison was a vegetable narcotic. I ordered the ladies to take lemonade and orangeade freely, and the father to do the same, but, in addition, to use mustard baths for the lower extremities, by which means all the symptoms were removed in the course of the day. They may be summed up in the following words:—vertigo, slight disorder of intellect, embarrassed speech, dilated and motionless pupils, eye dull and void of expression, disordered vision, hebetude, idiotic or puerile laugh, difficulty of standing, progression vacillating, dryness of the mouth and tongue, spasm of the pharynx, sensation of heat, and itching of the skin.

In regard to the suspected plant, I submitted it to the examination of two druggists, justly esteemed in the part where I reside, Messrs. Boudet, sen., and Gauthier, who did not hesitate at declaring instantly that it was belladonna; a well-known herbalist of the *halle*, to whom it was likewise shown, gave the same opinion most positively. The article had been purchased a month since, and there was scarcely any likelihood the fault would be repeated; nevertheless, I went the same

day to the herbalist's, and asked for the *menyanthes*, when, to my great surprise, he took out of a drawer bearing that name a plant every whit resembling that which I had obtained from M. F. I made the remark that this could not be the *menyanthes*, but he assured me positively that it was, so that evidently ignorance and not a mistake was the cause of his conduct. The same day, therefore, I sent a circumstantial account of the facts to the College of Pharmacy, accompanied with the two packets of the suspected plant. I was soon informed that the *belladonna* had been again recognised, and that two members of the college had been delegated to visit the herbalist, accompanied by a commissary of police, when the same substitution of the one plant for the other took place. Doubtless measures have been taken to prevent its recurrence*.

ABSTRACT OF THE EVIDENCE TAKEN
BEFORE THE PARLIAMENTARY
COMMITTEE IN 1834.

(Continued from page 721.)

SIR ANTHONY CARLISLE examined.

Q. "WHAT professional appointments have you held, and do you now hold?"—A. "I have been from early life a hospital surgeon; I was afterwards a teacher of comparative anatomy at my own house; then I gave lectures on surgery to the pupils of the Westminster Hospital; afterwards I was appointed Professor of Anatomy to the Royal Academy, which I held sixteen years, and renounced it when I came into the Court of Examiners in our College. I gave the lectures appointed by the trustees of the Hunterian Museum, at the College, about eight or nine years ago. I have been about nineteen years a Member of the Council of the College; have filled all the offices belonging to the College, and have been a member of all the committees. I am at this time a Member of the Council, and one of the Court of Examiners, and also a surgeon to the Westminster Hospital. Those are the only appointments which I hold at present." Q. "Do you approve of the present constitution of the Council of the College?"—A. "I trust that I am capable of giving an unbiassed and disinterested opinion; for as a public man I have always acted upon public principles. I have not sought my own personal interest in the discharge of my public duties, neither at the College or any other place. I think that the College,

* The shop of the herbalist belonged nominally to an old man who had received a diploma, but who, being unable to attend to it from ill health and being infirm, had given it up to his son-in-law, a young man who had never studied. The old man's name was kept up. Public health is certainly well guarded in such custody.

since I first belonged to the Council, have been in a state of progressive improvement as to discipline, and in all their public measures and proceedings. During the twenty years that I have belonged to the Council, the laws and regulations have been continually changing under the guidance of very *sagacious* and very *disinterested* men. When I mention the name of the late Mr. Cline, I believe it is publicly known that a more honourable, a more sagacious, a more public-spirited man never existed in any profession. He was always a very influential man in moving the measures of the Council; he was not a dictator nor a busy body in the College, but he was respected by every man in the Council, and he hardly ever proposed a measure that was not adopted by it. On petty occasions we are all subject to be opposed and to be left in a minority, but upon all the major points, Mr. Cline was generally acknowledged to be in the right, and he was, in fact, for many years the Mentor of the College. During those twenty years, the Council has passed several regulations, such as alterations of the by-laws and ordinances; but I do not know that anything has taken place, in my time, to change the constitution of the College in any remarkable manner; I trust and believe, however, that the College has been gradually improving in every part of its discipline. We have discovered occasionally that *we were not very good lawyers* (a brilliant discovery, certainly, for a College of Surgeons to make), and that we had not read our constitution with sufficient attention. (Oh, most lazy councillors!) Our charter was found to bind us to certain *things* which we had partly (wholly?) overlooked. For instance, it was found, on application to counsel, that the Court of Examiners, consisting of ten persons, had not, by the charter, a right to make any regulations affecting the profession at large. The Court was supposed in that respect to have exceeded its powers; and in one instance the point was this,—*What ought to be the laws and regulations to render persons eligible to be examined?* A question which affected the whole profession. Until that period, about seven or eight years back, the laws were principally made by the Court of Examiners, without the aid of the Council; but as soon as the Court found that they were in error, no laws for regulating the admission of candidates to be examined were from that period made, unless they were sanctioned, adopted, or made in the body of the Council. I believe that our charter demands that no regulations affecting the profession at large, shall be made by fewer than eleven members of the Council, and therefore we had committed an error in doing those *things* when ten only were present; not that the regulations have been made *remarkably* different from what they were before, since they have been submitted to the whole Council. Perhaps I may be al-

lowed to state, that the College of Surgeons is not a college of education, but a college for granting diplomas to practice. We have in all our proceedings, *lately*, at least, considered that to be the constitution of our body, viz. that we are not a college of instruction; and although we are bound, by an agreement with the Lords of the Treasury, to deliver certain lectures to illustrate Mr. Hunter's Museum, they are, in fact, not lectures of instruction to students; and the proof that the Council of the College of Surgeons do not view them in that light, is, that students are not permitted to attend these lectures until they have been twelve months in London, and bring certificates of having gone through the principal parts of the discipline of instruction which we require of them. The lectures are open to all the members of the profession, but not to students. An annual lecture, called the Hunterian Oration, has also been instituted, out of a special sum, vested in the public funds, presented by Dr. Baillie and Sir Everard Home, Mr. Hunter's executors. The object of the lecture is to commemorate Mr. Hunter's labours (and our own stupidity?). It is confided to a member of the Council (no doubt of it); it is not a matter of favour, (say you so, Sir Anthony?) and not of profit, for the lecturer only receives 10*l.*; in fact, the appointment *occasionally* goes a begging in the Council (and a beggarly mess they generally make of it, witness the mumbling exhibition of Sir William Blizard some time ago). The lectures illustrative of the Museum are open to the members generally; a great many persons have been, and now are, so appointed. Each Professor is required to deliver sixteen lectures, for which he pockets fifty guineas." (A trifle not worth looking at, when the excellence of the commodity is taken into consideration.)

To a question, whether he approved of the existing constitution of the College, Sir Anthony delivers his answer as follows:—"If the question extends to the whole profession, I would be glad to deliver my opinion upon that subject; if it refers to the College of Surgeons only, I say, without fear of being thought partial or influenced by self interest, that I do not know what regulation the legislature could at this time introduce into our College that would unquestionably improve it in its performance of public services and duties. Its discipline is progressively improving, and as far as its offices and uses are capable of being extended, it is in every succeeding year in a state of amelioration. For example,—it has formed a library of reference—the finest medical library in the empire; it is publishing an account of its museum, and thereby giving a taste for that branch of medical and surgical philosophy which is founded upon the general knowledge of the structure of the animal creation. *No private* individuals could ever have published those illustrative physiological

catalogues which are now coming from the College without being ruined. (?) They are costing us a great deal of money; but we have the wealth (plucked from the diploma buyers) wherewith to carry into execution these public services. For example (again), the publication of an illustrated volume of Mr. Hunter's catalogue has cost us lately between 600*l.* and 700*l.* We have one volume coming out that will cost us near 1000*l.* The taste for these subjects has been hitherto so limited, and the means among the profession to purchase such books, generally, so slender, that from the sale of the last illustrated catalogue, which is the most important one yet printed, only 6*l.* 7*s.* have been returned to the College during the last half year; therefore, had an individual without fortune enterprised the publication, he would have been in debt (how wise!), or, at the mercy of his bookseller. Nor is it likely that, until the knowledge of Mr. Hunter's physiological researches is more extended among the profession, and among the public at large, that such works will be saleable."

Q. "Different members of your Council are of opinion that its constitution admits of improvement. Some propose that a separate grade should be formed of men whose professional studies have been of superior character and duration; and that none but these should be electors, or eligible as councillors; others are favourable to vesting in the members generally the rights of electing and being eligible. Your President (Mr. Guthrie) thinks that the constitution should remain as it is, but on this condition, that all the deliberations of the Council should be conducted in public. Do you approve of any of these changes?"
—A. "I confess that my decided opinion, founded upon experience, is against any of these changes. I will mention the manner in which, and the principles upon which, the elections into the Council are conducted. On any vacancy occurring, the chronological list of the members of the College, beginning from the name of the person last elected into the Council, is read by the Secretary. And the names of those who practice surgery only, as they are read, are called out by the members of the Council, and stopped as it is called, and written down upon a paper. These are the only persons who are considered as eligible. In reading, for instance, a hundred names in succession, perhaps four persons will be found who practise surgery only. When five such names are pricked down the reading ceases. There is then an admonitory address read, which is among the ordinances exhorting the members of the Council to do their duty in the forthcoming election; to act upon public principles; to show no favour or disaffection to any individual; but to use an independent judgment, so as to fix their choice upon the most proper person. It was formerly the custom upon these occasions for the Seniors of the Council to offer some admonitions on the

way in which this very important duty ought to be exercised; and to point out, that whoever should be elected into the Council should be already a public man; not manufactured into one by becoming a member of the Council, but one who has already public claims and pretensions. Those claims have usually been laid down to be those of being a highly reputed teacher of anatomy or of surgery, or a surgeon of an extensive hospital. As ours is a college of surgeons and of surgery, hospital surgeons are reckoned as already public men. Their abilities and character as professional men and men of science become notorious in consequence of their public duties. They have the reputation of being either skilful, unskilful, scientific, unscientific, judicious men, or the contrary."

(To be continued.)

Reviews.

The Medical Quarterly Review. No. VIII.
The Edinburgh Medical and Surgical Journal. No. CXXIV.

WE shall content ourselves by simply noticing these journals, and making an extract from each, which will show the character of the matter they contain—to a certain extent. In the *Medical Quarterly* is "A Case of Morbid Adhesion of the Placenta. By Dr. Litchfield," which will be interesting to the general practitioner.

"Mary Farrell, ætat. 32, was attended in her first confinement by Mr. Barry, of Juddstreet, Brunswick-square, in March last.

"The labour, as described by Mr. Barry, was very lingering, the pains slight, and at long intervals. Sixteen hours after the commencement of labour, the accoucheur in attendance administered half a drachm of the powdered ergot of rye, and this dose was repeated every two hours; at the expiration of twenty-four hours, a dead child was expelled, and the uterus contracted forcibly round the placenta, so as to baffle the repeated efforts of the accoucheur to remove it.

"On the morning of the 12th of March, eighteen hours after the delivery of the patient, I was requested to see her in consultation. The uterus was found, upon examination, high up beneath the abdominal parietes, and contracted at its fundus into a hard and irregular tumour. The external parts of generation were swollen and painful, and the os uteri so rigid and unyielding as to resist the persevering efforts of the hand to dilate it and reach the placenta.

"The pulse at this period was full, hard, and at ninety-five; the tongue furred and feverish, the face flushed, and the patient complained of severe pain in the head; to relieve these symptoms, and lessen the force of the muscular contractions, I ordered ten ounces of blood to be taken from the arm, and prescribed

small repeated doses of tartarised antimony; fomentations with flannels were also applied freely to the swollen pudenda; under this treatment the violence of the symptoms subsided, and fresh and long-continued, but unsuccessful attempts were again made, to dilate the os uteri, and detach the placenta.

"During the latter months of pregnancy the patient had complained of fixed pain in the womb, arising, as she believed, from a blow in the abdomen; it seemed probable, under these circumstances, that the vessels of the uterine structure being stimulated to undue action, had thrown out coagulable lymph, by which the placental and uterine surfaces had become morbidly united. Being of opinion that it would be impossible, in the present state of the parts, to reach and overcome this adhesion, and having no fear of immediate hæmorrhage, I resolved to wait, and watch closely both the local and constitutional symptoms, abstaining for the present from further manual interference.

"In this way the case continued to progress until the fourth day, the patient remaining in a very satisfactory state. On the fourth day after delivery the discharge, which had set in as usual, became more copious in quantity, of a green colour, and very offensive smell; this last character was in some degree corrected by the use of injections of chloride of soda, and the patient went on, without any unfavourable symptom, till the ninth day, when a portion of the placental mass, equal to about one-third of its usual weight, was thrown off in a state of putridity. From this period, small portions of the placenta continued to detach themselves at intervals, until the twenty-first day, when all that remained of the adherent structure was thrown off.

"The progress of the case was unattended with pain or hæmorrhage; the patient improved rapidly during the time in spirits, strength, and appetite, and at the end of a month from her delivery, menstruated in a regular way. Strong cartilaginous bands were found in the placental mass."

Mr. Syme's Clinical Reports in the *Edinburgh* are very valuable; they display great ability, judgment, and scientific power. The following represent the character of these reports:—

"*Laceration of the Hand—Amputation of the Fingers at their Carpal Joint—Preservation of the Thumb.*—James Morton, aged 11, was admitted on the 26th Dec., on account of an injury which he had sustained in Leith the same evening from a machine for grinding colours. The middle, ring, and little finger of the right hand were removed, the joints of the fore finger were laid open, and the bones of it broken, while the integuments and muscles were torn away on both sides of the hand, half way up the metacarpus. As the thumb remained sound, with the exception of having had the nail squeezed off, its preservation

seemed very desirable, and though not acquainted with any similar case from which the utility of a thumb so insulated might be inferred, I resolved upon trying the experiment. A semilunar incision was made on each side of the hand, close to the margin of the laceration, and meeting at their extremities. The flaps thus formed were dissected off the metacarpal bones until their articulation with the carpus came into view, the joints were readily divided with a narrow sharp-pointed knife, and after the vessels that bled had been tied, a few stitches were introduced to keep the soft parts in their proper position. The patient suffered little local and no constitutional disturbance, but the thumb appeared so long and uncouth, that doubts were entertained as to the propriety of saving it. The wound healed slowly, owing to the muscles having been bruised more extensively than the integuments, but was completely cicatrised on the 20th Feb., and, though the patient cannot yet speak from experience in any particular instance, there can be little doubt that the thumb will prove very useful to him. He can use it with wonderful freedom, and may easily be provided with an artificial hand, which will increase the use he is able to make of it.

"*Purpura Hemorrhagica—Amputation of the Great Toe through the Metatarsal Bone—Hemorrhagic Tendency—Recovery.* John M'Lachlan, aged 12, was admitted on the 26th Dec. for the removal of a toe which had been diseased for twelve months, and promised no improvement. He was a thin pale boy, but not otherwise unhealthy looking, and had not previously suffered from any illness except the one complained of. On the 28th he suddenly presented all the characters of the most strongly marked *purpura hemorrhagica*. Blood issued from the sore on his foot, and all the mucous surfaces, coagulating in his nostrils and round his teeth, and passing copiously from the urinary organs and rectum. The discharge from the former of the two last mentioned cavities was much more like blood than urine, and unusually copious. Long livid marks, as if caused by the stroke of a blunt weapon, appeared on the limbs; bright purple spots appeared all over the body, and the tongue exhibited a number of ecchymosed blotches. The pulse was extremely frequent, and the stomach rejected food.

"Acids, wine, and tonics of different kinds were tried, but as all these means seemed only to increase the sickness and general uneasiness, they were laid aside, nothing being given to the patient except the mildest farinaceous nourishment. Under this treatment he gradually improved, the skin resumed its natural appearance, the gums and nose no longer displayed their bloody incrustation, and the evacuations became free from the sanguineous tinge. The patient regained his appetite, and gradually also his strength, so that he seemed able to suffer the operation. It was performed

on the 9th Jan., by making two semilunar incisions, one on each side of the joint of the great toe, and meeting at their extremities, so as to inclose the morbid integuments, and leave merely sufficient soft parts to come together after the removal of the toe, which was effected by dividing the metatarsal bone with cutting pliers. Three arteries were tied, but as there was still a considerable bleeding, which seemed to proceed from the cut surface generally, I filled the cavity with lint, and applied a bandage tightly round the foot. On visiting the patient in his bed about a quarter of an hour afterwards, we found his foot lying in a pool of blood, and lost no time in taking off the dressings and replacing them more effectually; graduated compresses were introduced carefully into the cavity, the foot was bandaged with the utmost tightness consistent with safety, and the limb was then laid on a cradle that raised it above the level of the body. No untoward occurrence happened afterwards, and the patient was dismissed cured on the 2nd of February.

“ Though the astringent and stimulating measures used in this case did not prove useful, it does not follow that depletion would have been advantageous. In such a very weak state of the system, I think it could not be used with safety, though its efficacy under other circumstances is fully established. A robust country blacksmith applied to me last December, on account of purple spots which had appeared on the body generally, but particularly the limbs, in which he frequently felt severe shooting pains. He complained of sore throat and difficulty of breathing, and referred his illness to exposure to cold. He was advised to lose some blood, and performed the operation himself with so immediate relief, that he allowed four pounds to flow, which, though much more than the quantity prescribed, and more probably than was required, had the desired effect. Between such extreme cases as the two which have been mentioned, a great variety occur, and require a modification of treatment corresponding to the characters they present.

“ *Simple Fracture of the Os Femoris—Reunion—Death at the end of Two Months—Dissection.*—Susan Barr, aged 51, was admitted on the 2nd of April in consequence of having sustained a fracture of the left thigh bone, which she stated had happened the preceding evening from being thrown down by a man who ran against her while crossing the street. The injury having been ascertained to be seated in the upper third of the bone, the limb, properly supported by splints, was placed upon a double inclined plane.

“ On the 15th she was suddenly seized with sickness and vomiting, and then became extremely hot and restless, with dry brown tongue, and quick pulse. In three or four days these unpleasant symptoms left her, and on the 20th of May the limb was found sufficiently firm to be freed from restraint. On

the 27th she had a rigor and a return of her former symptoms, which continued with progressive aggravation until the 7th of June, when she died.

“ The fracture had evidently been comminuted. The broken surfaces remained *quite unconnected*, a soft bloody semifluid substance only lying between them. In the medullary canal there had been a deposition of osseous matter in a sort of granular state, and the external edges of the fracture were united by bridges of dense bone. In this case, then, the *provisional callus* of the French pathologists was nearly completed.

“ It is a remarkable fact in the history of pathology, that Duhamel's theory of the reunion of fractures, which was founded on an erroneous analogy between the formation of wood and that of bone, has proved to be much nearer the truth than that of Haller and his pupils, who entertained correct opinions as to the formation and nourishment of bone. Duhamel supposed, that, in a case of fracture, the periosteum had its inner layer converted into bone, just as the inner layer of the bark of a graft is converted into wood, and that thus a connecting bridge was formed between the broken bones. When specimens were shown to him of the union extending through the medullary canal, he explained the appearance by alleging, that the *internal* periosteum had suffered a similar change; and when his attention was called to sections of old united fractures, in which a compact mass of bone occupied the seat of the fracture, he was satisfied with supposing, that the external and internal periosteum had united. Rude and crude, and ill-founded as this theory was, it approaches wonderfully near the enlightened views of Breschet and Dupuytren, who have been the first to explain satisfactorily the process by which the every-day accident of fracture is repaired. The reader is no doubt aware that the explanation formerly admitted, of an organisable substance effused from the broken bones into the space between them, and gradually hardened into bone, is quite untenable; and that the process of reunion truly consists, 1. in the formation of a capsule surrounding the fractured extremities by thickening and condensation of the neighbouring tissues; 2. the deposition of bone in this capsule, and in the medullary canal; 3. the growth of bone from the surrounding osseous surfaces until the cavity is completely obliterated. The second stage is generally so far completed in from three to six weeks, that the limb regains its rigidity sufficiently to resist any moderate force, and the cure is then said to be completed; but the real cure requires at least as many months. The case that has just been related affords a striking illustration and confirmation of this process; since, if it were not for the provisional callus or bridges of new bone connecting the external edges of the fracture, the bone would still be flexible, and, in fact, one of the halves is flexible from the sec-

tion having been accidentally made so as to leave the bridge more on one side than the other.

“Fracture of the Patella—Reunion, with no perceptible interval between the broken surfaces.”—William Vere, aged 62, on the 14th of October, slipped his foot while descending a stair, and fell forward, striking his right knee. The consequence was a transverse fracture of the patella, for which he was admitted on the 22nd. The fracture was very distinct, but the joint, contrary to what usually happens, contained no serous effusion. The limb was laid straight, with the foot slightly elevated, and the ordinary bandage was applied to the knee. The patient proving unruly, recourse was had to a more efficient apparatus, contrived and successfully employed by my assistant, Mr. Peddie. This consisted of two pieces of leather, about four inches broad, made to buckle round the limb above and below the fracture, and provided with another set of buckles, by means of which they could be drawn together so far as might seem necessary. The broken surfaces were thus kept in such close contact, that they united without any perceptible interval, and the patient was so satisfied with his apparently perfect recovery, that he insisted upon leaving the hospital on the 7th of November, though warned of the probable bad consequence of exerting the limb.”

Foreign Medicine.

ACADEMY OF MEDICINE.

Sittings of the 28th April and 5th May, 1835.

Lithotripsy in Children of Tender Age.

BY M. LEROY.

Reported to the Society by M. VELPEAU.

In this memoir the author endeavoured to prove, from experience, that for a long time children have been submitted to this operation; and we are wrong in supposing that the practice is altogether new. The cases which the author speaks of are five in number, all relating to children under six years of age.

The first child he speaks of was four years old, and operated on in the Hôpital de l'École in 1828. The stone was nearly an inch in diameter; though extremely fragile, yet it required six sittings before it was completely crushed: some of the fragments became imbedded in the urethra, and caused the little patient great suffering, whose health otherwise was completely re-established. MM. Bougon, Rebaïl, Velpeau, together with a number of students, witnessed this operation. The second child, five years of age, in whom the calculus offered nearly the same volume as the preceding, occupied five sittings for its complete destruction. The third had suffered for a year; the stone, which was about the size of an almond,

and partially engaged in the urethra, was repelled into the bladder, and broken with the three branched instrument. One of the fragments of this calculus occupied the front of the prostate the next morning, and produced acute pains. Two days afterwards, a fresh fragment checked the passage of the urine in the same way, and re-produced the same symptoms: with great difficulty it was repelled, and afterwards broken. The indocility of the child, who from this period did not experience the least suffering, prevented the use of catheterism; consequently it was impossible to ascertain if the cure was effected. The fourth patient, operated upon by M. Leroy, was four years of age. The stone, which was extremely small, was broken with facility at two sittings. At the third sitting, a small fragment of the pincers remained in the bladder, and the author was fortunate enough to extract it by a new pair a few days afterwards. A small portion of stone remained in the urethra with it, which, in the first place, could not be extracted. M. Dupuytren, under whose care the child was placed, resolved to perform the bilateral operation, which was attended with great success. The fifth and last case occurred in an infant, three years of age, in whom the calculus did not exceed from three to four lines in diameter, which was destroyed at one sitting.

These facts, said M. Velpeau, prove without doubt that lithotripsy may be practised at the most tender age. But the question is, does it prove that the operation should be preferred to lithotomy? M. Leroy appears to have decided, that in cases in which the stone is of large calibre, the operation of lithotomy is much more favourable; but if by possibility we could always assure ourselves of the smallness of the stone, he thinks the preference might be given to lithotripsy. In this consideration, says M. Velpeau, we perfectly agree with him. Lithotomy in children scarcely exposes them either to hæmorrhages, to wounds of the rectum, to infiltrations, to peritonitis, or cystitis, and requires only a few seconds to free the patient from excruciating agony. Crushing the stone, on the contrary, presents the whole of these difficulties. A calculus of an inch in diameter, will not require more than eight or ten sittings, each of which are not only fatiguing, but extremely painful. The urethra in children will not allow the surgeon to employ large lithotrites; and it is also necessary to break the stone into very small fragments. The bladder frequently, from its contractility, will expel portions of the stone into the urethra, where they naturally check the flow of urine, and give rise to much suffering to the patient. Finally, the sufferings are, if acute and prolonged, so great as to oblige the operator to use great force. It will suffice to recal the excellent observations of M. Leroy, in order to be convinced that in infancy lithotomy is truly less dangerous than lithotripsy. Might I be presumptuous enough, said M.

Velpeau, to add that, in its relation, crushing of the stone merits less eulogy than has at the present day been accorded to it. The general opinion of medical men is too much in its favour. Those pretended, and, I may say, marvellous cures which have been spoken of, I am quite confident, have misled not only the public, but most medical practitioners. Many men, I am aware, from the few words I have now hazarded, will feel much indisposed towards me; nevertheless, astonished by our allusions, if I am not greatly deceived, a much greater reflection will be cast upon the ill effects of this operation than I have at present advanced. It would be then but slightly conforming to the reason of the age, if any surgeon, without calmly considering, examining, and hearing everything relating to these operations, gave an opinion upon the subject. The society, abused by some ostentatious announcements, should be enlightened as regards this. For, on the one hand, many have taken delight in increasing the dangers of lithotomy, and, on the other, have considerably exaggerated the innocuity of lithotripsy. Lastly, when we have attempted to compare the two operations, we have constantly avoided placing them in analogous conditions.

In order to appreciate the relative value of lithotripsy, we should endeavour to ascertain whether or not there have arisen more deaths since its invention. No one, except M. Blandin, has dared to prove that from experience he was quite positive the balance was much in favour of lithotomy. Another means, perhaps yet more decisive, remains to prove this fact. But the exclusive admirers of lithotripsy do not appear to wish to make an examination on this point. The means spoken of would be to place in the same establishment a certain number of patients affected by stone. They should be, as nearly as possible, of the same age, constitution, and general health; the calculi in each of the same volume and composition, and the alterations of the urinary passages precisely the same; and then treat one half by lithotomy, the other by lithotripsy, taking care that both the operations were performed by men equally skilled. The result of this would for a certainty definitely resolve the question, whilst the announced proofs are really incapable of convincing men of reflective minds. What has given so much importance to lithotripsy in the eyes of the world is the fear of the knife; and this very same dread has been the cause of other means being had recourse to, such as compression in the treatment of cancer. In lithotripsy it is the pain which they pretend being capable of avoiding; but that produced in the operation of lithotomy is in fact infinitely less. It is the same with regard to the duration of the operation, as to the chances of a relapse of the disease, &c. If, then, lithotripsy is a happy conquest in modern surgery, it will not be less so compared to lithotomy, a method unexceptionable when human reason will allow it

to be placed in its natural limits, not only in children, but also in adults. Lithotripsy causes much greater danger than lithotomy in every case in which the calculus presents great durability, or exceeds in volume a walnut, particularly if the patient has not much antipathy against this latter operation.

Discussion on Lithotomy and Lithotripsy, caused by the preceding Report, at a Sitting at the Academy of Sciences, May 5.

M. Amussat requested permission to read a few lines in reply to the violent attack of M. Velpeau against lithotripsy. He found that he had much more reason to be astonished with this attack, made at a moment when this operation triumphed on every side over prejudice, and the routine which unfortunately opposed itself too frequently to the hoverings of innovations even the most useful to humanity. M. Amussat thanked the Academy for having adjourned the discussion, and protested against the errors advanced by his colleague. According to this surgeon, lithotripsy is as simplified as possible; but it is an operation which demands much study and care, and which, less brilliant than lithotomy, does not please like the latter by its immediate results.

M. Amussat recalled to their minds that he was the first who advanced, in 1827, what M. Velpeau had stated, viz.—that in infants lithotomy is preferable to lithotripsy, and he thinks also that the success of this new remedy was in the first place exaggerated. He admits the reproaches of exaggeration and the disbelief raised from the results of lithotripsy. He states that he is not an exclusive partisan, and he does not think that this operation should always take the place of cystotomy. M. Amussat blamed M. Velpeau for stating that, in ten years, lithotripsy would be judged much less favourably of, and was astonished that a young surgeon, who ought to be disposed to collect new methods, should use such language, which he conceived only could issue from the mouth of one of the oldest surgeons, who systematically repelled every idea that was made for the advancement of science. He attacked also the statistical exactitude quoted, and did not believe that, at the present moment, it was possible to be very exact, because the cure remained among the partisans of the two methods. A very powerful argument in favour of lithotripsy is the preference which has been given to it by medical men who have suffered from stone, and the confidence which M. Amussat puts in it is such, that he would not hesitate in attempting to destroy with instruments of this kind a stone which altogether filled the bladder, because, in these cases, lithotomy is nearly always fatal. M. Amussat quoted a passage from M. Boyer, 1791, vol. ix. p. 517, where he says, “that without him he should have been deprived yet a very long period of the benefits of lithotripsy;” and a little further on (page 551), where he adds, “that at the present day (1831) the

number of patients cured by lithotripsy is so considerable, that not the least doubt could remain of the advantages of this operation." M. Amussat observed, that since that time, M.M. Jacobson and Heurteloup have doubted at least the value of lithotripsy, and he felt astonished that M. Velpeau endeavoured to lessen the judgment which M. Boyer has conscientiously ventured on this operation. We cannot accept the proposition which M. Velpeau proposed, of getting a certain number of patients, and operating on half by lithotomy, and on the other half by crushing. The two operations present chances too different for us to submit patients to the experiment. M. Amussat said that he could not allow the words of M. Velpeau, which were intended to cast a doubt on the value of an operation to which the Academy owed the conservation of two of its most distinguished members, to pass without a reply. That their predilection for lithotripsy would have a weight much greater in the balance, when experienced surgeons found in conditions the most favourable, in order to appreciate the real value of cystotomy. He finished by stating that, contrary to the opinion of M. Velpeau, lithotripsy was the general rule, and lithotomy the exception.

M. Velpeau. I must beg, in the first place, to make a few remarks on M. Amussat. He has just read a written reply, for which he has had eight days to prepare. My position consequently is disadvantageous, since it is necessary that I should reply immediately. As to the hard expressions used in this reply, they do not trouble me: I leave the whole to the responsibility of M. Amussat. To the other he has not advanced a single fact, or anything like reasoning. He said, if I was affected with stone, I should prefer lithotripsy; and when even physicians are affected, they have in general no more courage than other men. M. Amussat has pretended that it was unimportant to give statistics; but the proof of the preference being given to one method over another, must be made by comparative results. I say he has abused the public, and that he is abusing himself, in believing that there is a greater portion of success attending lithotripsy. The documents relative to lithotripsy have not been all published: neither M. Amussat, nor M. Leroy d'Étrolles, nor M. Heurteloup have written a general work. They have published a certain number of facts, but they have not given complete summaries. The summaries of M. Civiale, Bancal (the marks of which they bear date), and particularly of M. Leroy, which I dare not quote, are certainly not very favourable. If I asked a surgeon, out of eighty-three cases, not picked, if he would believe that he could cure the whole, he would answer me—yes. I will put the question to M. Sanson.

M. Sanson.—At least four out of five.

M. Velpeau.—And if I put the question to M. Amussat?

M. Amussat.—I cannot reply in this way.

M. Louis.—We cannot thus establish a particular discussion, and challenge the members of the Academy.

M. Velpeau.—Very well, gentlemen, the answer is written and printed. Out of eighty-three patients operated upon by one of the most dexterous lithotritists, forty-two recovered and thirty-eight died; and out of the forty-two cured, nineteen were attacked with severe vesical symptoms. The result is not the same on the table. We will say, at this period lithotripsy had not arrived at its fullest perfection. In 1830, out of twenty-four patients operated on by lithotripsy at the hospital Necker, thirteen recovered and eleven died. More recently again, fifty-three entered into the same hospital, forty-three of whom were submitted to the operation of lithotripsy, thirteen died and thirty recovered. The others would not submit to the operation. M. Ledain published, in the *Gazette des Hôpitaux*, thirty cases, eighteen of which recovered, eight died, and four would not be operated upon.

In the work of M. Bancal, out of fourteen cases two only recovered, and in one of them the branch of the instrument broke, and caused very dangerous symptoms. There is also on this subject the account given by M. Civiale and M. Larrey, and the only difference was in the interpretation of facts, the whole number being 244, out of which were cured 130, the deaths and those who had not submitted to the operation 114. For the operation of lithotomy I have collected together a number of facts, some from the Parisian Hospitals, and others from the accounts of French and foreign surgeons. The following is the account, as collected by M. Velpeau:—

	Cases	Cured	Died
Charité Hospital, 1719 to 1728	1200	945	251
Sancerotte	1629	1482	147
Dupuytren (Dict. de Med. et de Chir. Prat.)	356	295	61
Smith	707	609	98
Cross, Norwich	704	619	98
Cheselden	213	189	24
Frère Côme	100	81	19
Souberville	133	116	17
Renzi, in an Italian Hospital	389	241	60
Martineau	84	82	2
Dudley	72	71	1
Viricel, at Lyons	83	80	3
Ouvrard, at Dijon	60	57	3
Pansa	70	65	5
Pajola	50	45	5
Dupuytren, in his series	70	64	6
Naples, City	21	20	1
Petrunti, Naples	26	25	1
Santon, Naples	19	18	1
Chelius	23	22	1
Smith, America	19	18	1

Should these accounts be disbelieved, I should possess the same right of disbelieving those relating to lithotripsy, and perhaps more so.

M. Rochoux.—We ought to perceive how difficult it is to discuss a lengthy subject like the present at one sitting of the Academy: the only thing that can be discussed is a very short proposition, from which we have no right to depart. I might reply to the prediction of M. Velpeau, on the loss of lithotripsy in ten years, by a contrary prediction. The most favourable number that we can admit for the cures in lithotomy is a tenth; in lithotripsy, if the cases are properly chosen, doubtless not one out of twenty would die. When there does not exist any organic affection or disorder of the bladder, and the calculi are of moderate sizes, which happens in four-fifths of the cases, lithotripsy I believe to be as innocent as catheterism; so that, as we advance, we shall be better able to discuss the cases, and there is no doubt but the epoch will arrive when lithotripsy will be practised with much greater success than it is at present.

M. Velpeau.—I have not advanced any prediction without having thorough grounds to stand upon. I stated that lithotripsy was not only useful, but, sometimes, extremely necessary, but then confined it to its just limits; these limits have been too scattered. M. Rochoux, doubtless, has not seen lithotripsy many times, for if he had, I am convinced he would not state lithotripsy to be as simple an operation as catheterism. As to the dangers of the operation, I will content myself by observing that, since the discovery of lithotripsy, we have not received 100 patients in the different Parisian hospitals who have been lithotritised, and there is not a hospital where some deaths have not been recorded. Death supervenes sometimes by nervous symptoms. I cannot enumerate the whole of the symptoms which follow, but it will suffice to say that inflammation of the parts frequently occurs, ulcerations of the testicles, perforations of the bladder, phlebitis, &c. The pains are frequently unbearable, the operation lasts for a long period, the instrument may break in the bladder, and, in a word, the number of accidents are much more considerable than we meet with in the operation of lithotomy.

M. Larrey regretted that the report of M. Velpeau had been so attacked by M. Amussat. He thought that M. Amussat alluded to him when he spoke of the old surgeons opposing the progress of science. He maintained, however, that his report of M. Civiale was very correct, and the notes were furnished by the dressers of the hospitals. As to Boyer, he has many times stated in the presence of the members of the Commission of the Academy of Sciences, that the operation of lithotripsy would never continue in use for a long period.

M. Amussat had no wish to address M. Velpeau in an offensive manner; and far was he from applying the observation on certain old surgeons to M. Larrey.

M. Roux thought that, in spite of the facts given by M. Velpeau, the collected cases could

not be so exact as those of lithotripsy. He did not know to what point lithotritists had been led, but they should have positive proofs, and be able to establish by the same, the number of successful as well as unsuccessful cases. Since 1804–5 I have performed the operation of lithotomy 5, 6, or 700 times, and I avow that I was unable to watch more than 100, 150, or 200 of these cases. M. Boyer stood in the same position, and if M. Dubois was here he would doubtless tell you the same circumstance. To speak generally, I should say that I lost about 1 out of 5 or 6 in adults, and 1 in 20 in children. M. Lisfranc (who resigned the chair to M. Louyer-Villermay, Vice President), M. Dubois, and myself, have both undergone the operation of lithotripsy. M. Velpeau has wished to make it understood that we were patients, and that this operation was imposed upon us, but neither M. Dubois nor myself have had any desire to be deceived. The operation was performed, and at a time, too, when I thought myself very near my end. I have followed lithotripsy; I had eighteen months since a voluminous calculus, which had not been detected; I had no affection of the bladder, and I was fully aware that I must submit myself to repeated operations. I laid by for some time, and I am convinced that lithotripsy is not a method which should preclude lithotomy; but that, in the greater number of cases, it is preferable to it. I submitted to ten sittings, and now I am quite well. M. Dubois has performed the operation of lithotomy a great many times, and enjoys a merited reputation; nevertheless, he did not wish to undergo the operation, but preferred lithotripsy, and is now very well. A statistical account has been quoted by M. Velpeau; where he has procured it I do not know, but here is one which I have extracted from the article of M. Begin, from the Dictionary of Practical Medicine and Chemistry: “Since 1824,” says the author, “M. Civiale has cured 429 patients, 14 of whom were children, 190 adults, and 225 old people. Amongst them, I observe, 419 were males, and 10 females; 244 have been submitted to lithotripsy by successive perforations, 236 have recovered, 5 have died, and 3 continued to suffer. Out of 185 others, 88 have been submitted to the different operations for lithotomy, 48 died, 32 recovered, and 8 remained with the infirmity. I have myself frequently performed the operation of lithotomy. I have seen it performed many times in the city, and in the hospitals, and, according to my calculation, one out of four have died. Perhaps in other places they have succeeded better than in Paris: it is a fact which I have not sufficiently examined. Is it possible to find such disadvantageous results from lithotripsy? Doubtless there are some cases in which it is highly improper to perform it; but there are exceptions, and, as a general rule, I should say lithotripsy should always be preferred.”

M. Velpeau.—We are not then far from understanding each other.

M. Double.—On the contrary, your conclusions are yet at some distance from each other. (A laugh.)

M. Velpeau.—I said, that when medical men were affected by stone, they allowed themselves to be influenced by their own feelings; certainly, when doctors are affected by stone, they do not disown that they are afflicted. I do not wish to say by that, that they had delirium; but simply that they were feeble, like all other patients. As to the statistical article of M. Begin, it is not M. Civiale who speaks: I took my facts from the publications even of M. Civiale. I examined the reports made at the Institute. I have seen also many cases of stone. M. Roux has remarked, with something like truth, that it would be difficult for him to give a correct statistical account of lithotomy; but there are some establishments where this has been done with great care. They have noted the day, the hour of the operation, age, sex, weight and composition of the calculus, &c., consequently we are authorised in stating, after what we know, that lithotripsy is not to be judged in such a favourable way, and to be practised only as the exception, and not the rule. In lithotripsy we choose the patient, we operate only if the stone is small, crisp, and the organs are healthy; but in these cases lithotomy is less dangerous.

M. Sanson.—The discussion is now far advanced. I wish only to speak on a few points of it. I listened to the defence of lithotripsy by M. Amussat, and I must say that I found his sentiments and judgment were founded more upon theory than facts. In the report of M. Velpeau, on the contrary, I find theory, and what is better still, that founded upon facts. M. Amussat says, that lithotripsy is difficult, and requires much dexterity, and he concludes that ordinary surgeons should reject its use, because they have not been sufficiently versed in its practice. Doubtless, myself, I want the experience; for those operations that I have performed have not succeeded so well as lithotomy.

M. Amussat.—Specify better your facts. I should imagine that you applied yourself entirely to me.

M. Sanson.—I said at the commencement that you were not skilled in it. I believe myself, then, a competent judge. It has been stated that lithotripsy will be more general than it is at present. I think quite the reverse; for in all those cases where lithotripsy cannot be performed, as well as those in which it might, lithotomy is always practicable. Lithotomy is always more certain; by it the patient is at once completely relieved; whereas in lithotripsy, on the contrary, fragments are frequently left in the bladder. Nearly always the cure is more rapid after lithotomy. In lithotripsy, though the patients may be freed from the stone, they suffer in the majority of cases for a long period, either in consequence of the applications of the instrument, or particularly in consequence of the passage of

fragments. I do not deny but in lithotomy we are exposed to hæmorrhages, perforation of the rectum, or lesion of the vesiculæ seminales, to phlebitis, or to pelvic abscesses; but in lithotomy we observe the same thing, and the other symptoms attending this latter operation are much more numerous. Without doubt lithotripsy is a splendid operation, but it is the exceptional, and in this opinion I must follow the advice of M. Velpeau. It has been stated that all medical men attacked with stone allow themselves to be lithotritised; as for myself, I avow if I was affected with a small stone, and my bladder was healthy, I would not submit myself to a lithotritist; I would perform the operation myself, and trust my bladder to nobody.

M. Amussat.—I have advanced facts: I say that statistical accounts prove nothing, for they are generally manufactured. But you take lithotripsy in its infancy. Is it proper to compare it to actual lithotomy?—Not unless you can compare it to lithotomy when also in its infancy.

M. Velpeau said, it is proper to compare cases, but humanity would not permit you, in the actual state of science, to put aside a number of patients operated on by lithotomy, and an equal number by lithotripsy. Hospital surgeons do not keep a sufficiently exact account of the indications from lithotripsy, and it is for this reason that patients so rarely present themselves to the hospitals, and prefer going to the lithotritists. In lithotomy cases the most favourable are not exempt from hæmorrhages and other accidents; in these cases it is said lithotripsy succeeds remarkably well, so if this were true, lithotripsy would then be the rule, and not the exception. I now plainly see that we do not agree (a laugh); you perform lithotripsy when you have small stones, and I also (a laugh). But these are the exceptions, and the most serious symptoms and death supervene between the hands of MM. Civiale, Heurteloup, Leroy, Dupuytren, Bancel, &c. Then lithotripsy is not without its dangerous consequences.

M. Lisfranc.—I am very happy that MM. Sanson and Velpeau have avowed that if they were affected with a calculus they would lithotritise themselves. Lithotripsy is thus preserved (a laugh). As to discussing the patients of M. Civiale, I must maintain what I have advanced. Lithotomy, moreover, is not so innocent when the calculus is small; sometimes the calculus is not discovered, at others the operation has been performed, and none found to exist, and the patient sometimes dies. It would be superfluous, in an assemblage like the present, to signalise the number of serious symptoms which follow the operation of lithotomy; it will suffice to say that they are very serious, and the operation is frequently fatal.

M. Velpeau again repeated, that unless the calculus was very small he would not allow the lithotritist to operate upon him.

On the proposition of M. Lisfranc, the discussion was deferred until the next meeting. In our next we will continue this subject.

On the removal of Sequestra without an Operation.

Dr. Bouget has published a new plan for the removal of sequestra without an operation, in the *Journal de la Société de Médecine de Bourdeaux*, in an article entitled, "Souvenirs de la Clinique de Delpech."

M. Delpech, discouraged at the unfortunate results in several cases of necrosis of the tibia, turned his attention to measures which might remove the sequestrum, without having recourse to the painful operation which is generally necessary. In this search he was successful, for he found that, by means of diluted sulphuric acid, he could destroy the phosphate of lime in the bone to be removed, which is then reduced to its gelatinous parenchyma, and can be easily taken away with the common dressing forceps.

Delpech first employed this application in the year 1814. At this period, the wounded at the battles of Orthes and Toulouse, flocked in such numbers to Montpellier, that the Hôpital St. Eloi was soon crowded, and a supplementary one was formed, at the head of which was placed M. C. Fages, since so well known by his valuable lectures on external pathology. Hospital gangrene soon appeared in both hospitals, and caused such extensive ravages that the majority of the amputations terminated fatally; even in those cases which were the most successful, a greater or smaller portion of bone was left exposed by the destruction of the soft parts. A young man, who had undergone amputation of the arm, and had twice suffered from hospital gangrene, which had been with difficulty arrested, had the humerus projecting about an inch and a half beyond the flesh. According to the ordinary treatment the sequestrum would not separate perhaps for months, but it happened far otherwise under M. Delpech's directions. He caused the external surface of the bone to be covered with a pledget of lint, soaked in dilute sulphuric acid, and a wad of the same, equally wetted, to be passed into the medullary canal, whence the reticular apparatus had been previously removed; at the end of twenty-four hours the portion of denuded bone was so softened that it could be easily detached: ten days after the extremity of the bone was covered with fleshy granulations, and a complete cure was speedily accomplished.

In the year 1816 a man entered the clinical ward, having a necrosis which extended through the whole length of the tibia. Although he evidently possessed a good constitution, and was apparently capable of undergoing a serious operation, M. Delpech determined to have recourse to the proceeding which had proved successful in the previous instance. He destroyed the soft parts at the

upper part of the leg by means of the potassa fusa, and when the eschar, which was about the size of a crown-piece, had sloughed, he applied a pledget of lint, soaked in the dilute sulphuric acid, to the bone; after two or three dressings, renewed every five or six hours, it became soft enough to be taken away by dressing forceps. This being effected, the application of the potassa, followed by the acid, was made lower down; the sequestrum was exposed to the extent of five or six inches in length, and an inch and a half in width; it was then extracted with the greatest ease. It was more than six inches long, and constituted nearly the two-thirds of a cylinder. The patient left the hospital quite well one month after his admission.

From that time until 1822, when I left Montpellier, adds M. Bouget, I have seen M. Delpech constantly have recourse to this plan of treatment, both at the hospital and in private practice, and always with success. I have also used it myself with advantage in a case of necrosis of the tibia in a child.

THE

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ALTERATIONS IN THE LAWS OF THE COLLEGE OF PHYSICIANS.

"Timeo Danaos etiam dona ferentes."

THE College of Physicians have at last, after many throes and much ado, consented to a certain degree of reform taking place in their learned body. They have determined, after some lengthened and bitter discussions, we are inclined to think, to allow public and professional opinion to have some weight in their deliberations, and to bend their necks, President and Fellows, beneath the pressure of that force which the community, lay as well as professional, have for many years unceasingly applied to them. Their bickerings and oppositions have been brought to a close. Their discussions with regard to a revision of their laws have terminated: and their new enactments, statutes, or whatever they may choose in their wisdom to designate them, are ripe and ready to be put in execution.

The official document, expressing the alterations and modifications of the laws hitherto governing this aristocratic portion of the medical framework, is now exposed to the light, and may be read by all interested in the result. Much that is new will not be expected; some trimming of the old has been ventured upon; and, altogether, a new curriculum or grindstone furnished for the benefit of the public, and the enlightenment of the Corinthian department of the professional world. How this grindstone, cut from the Corinthian pillar, will act—beneficially or otherwise, to the manufacturers, we will not, for the present, pretend to give a judgment, but leave that question, after making a few remarks upon what has been achieved, to the critical acumen of our readers.

The first alteration of any consequence in the old code which strikes the view, is the ordinance of a set of councillors, or, a better phrase would be, middlemen, Cerberian functionaries, whose office will be threefold:—first, to select the Censors, the judges of the Licentiates, subject to the veto of the President and his body-guard, the Fellows; second, they are to choose such of the Licentiates as are to be eligible as Fellows; and, third, they are to act as a sort of drudges, men of all work, authorised to consider and report to their superiors all matters submitted to them officially, but liable to have the said reports, &c., condemned or approved, as may seem fitting to the College.

Now out of what materials are these committee-men to be selected? Are they to be chosen out of the Licentiates, senior or junior, or a mixture composed of Licentiates and Fellows?—Oh no; no such thing: they are to be balloted for from among the Fellows—honest Fellows!—men who enjoy no other advantage in

society than that of being placed (through no professional merit, but by the strength of aristocratical prejudices) in very conspicuous and honourable situations,—men who, among other privileges, enjoy nearly from their noviciate the power of becoming examiners of the fitness of other physicians to be Fellows or Licentiates,—men who, while but embryos, as it were, in college corruption, become visitors of the shops of apothecaries for the purpose of inspecting the flavour and quality of their medicines, and commissioners under the act of the legislature for licensing houses for the reception of lunatics,—men who, although almost imberbous, luxuriate in a degree of rank in their profession, from the single fact of their being Fellows, which ought only to belong to the staid and experienced physician.

Out of such materials, then, are these Janus-faced mediators between the Censors and Licentiates to be chosen. Picked out of the number of the Fellows, they will act as deputies of that body, in selecting such Licentiates as may be most agreeable to their attic taste, and these again may be approved of or rejected, according to the caprice of the oligarchs. Verily we perceive rottenness in this regulation. Self-election, that curse of corporate bodies, and all the abuses thence arising, will be perpetuated by it. In the Fellows, virtually, the election of Licentiates into their body will still remain; and although the number received in a given time will be greater than heretofore, yet no other advantage than this will accrue to the proscribed and hunted Licentiate from this Council, Committee, or whatever other name may better befit it. The Licentiate is admitted to no office. The management of the body to whose laws he must be obedient, is to be carried on entirely without his voice, and even its

library is to be, as it has, *in effect*, ever been, a closed book to him, unless opened through the agency of some Fellow. In fact, the Fellows themselves are still to be the *arbitratores summi* of those whom they may deign to receive among their order. Let the profession at large pronounce judgment on such an ordinance.

The invidious orders of Candidates and Inceptor-Candidates are to be buried and annihilated, excepting and saving, as the lawyers have it, the vested rights (another curse of corporations) of such as are of those orders already; those are to live on and enjoy their wonted privileges. For the rest, the future Fellows are to be chosen from among the Licentiates of four years' standing, always bearing in mind, that they must be first selected by the Council of Fellows, the composition of which we have already mentioned.

We come now to the qualifications demanded in order to obtain the license in future. These are, proofs of having cultivated medical studies for five years. These studies to consist of anatomy, the theory and practice of medicine, chemistry, materia medica, natural history (especially botany), obstetrics, medical jurisprudence, and the principles of surgery. Besides which, it is ordained that no one can be admitted among the number of Licentiates without first producing testimonials of having attended the medical practice of a hospital during three complete years; and no hospital containing fewer than one hundred beds will be recognised as sufficient. Such persons as have studied abroad, and desire to become Licentiates of the College, must adduce proof of having pursued for five years a curriculum similar to the above, and, moreover, of having attended hospital practice at a British hospital during the period of one whole year. The trans-

lation of Greek into Latin will not be demanded, but the rendering of Latin into English will be a *sine quâ non*. The examinations may be, as the Censors please, either in Latin or English. We hope, for the sake of obtaining a thorough knowledge of the candidate's capabilities, that the latter, though the most homely language, may be universally adopted. Latin colloquies between examiner and examinee have not, except very rarely, been productive of satisfaction to either party.

At the first examination, the President or Vice-President will ascertain where the candidate has obtained his education, whether in a university or elsewhere, and what honours or degrees, whether in philosophy, the humanities, or sciences bearing relation to medicine, he may have obtained; and these particulars are to be noted down, and preserved by the Registrar. This ceremony is a twig of the old College birch, but, we must confess it, a useful one, and worthy of being retained. The fear of it will induce candidates to be a little more solicitous about their general information than it is probable many of them would otherwise be.

Such then, is the substance of all that is important in the concessions with which the College of Physicians, after an ungracious delay, have favoured the Licentiates and candidates for their licence. The whole is not much; but if we take a retrospective view of the policy avowed and pursued by the rulers of this institution for years past, we shall feel surprise that they have done even thus much. If we look at the evidence of the courtly and classic Sir Henry Hallford before the Parliamentary Committee on medical education, we shall be struck with wonder that with such a head, the ancient prejudices and long-tried obstinacy of his followers

should ever have been subjected to revision, much less to alteration. That the iron yoke which pressed on the necks of the Licentiates has been lightened, and admission to the Fellowship rendered more just and equal, is a matter for congratulation, no doubt; but the tardiness with which this piece of justice has been granted, will ever cause a doubt as to the motives which actuated the concession. Had this measure, trifling though it is, been conceded some years since, it would have come with a better grace. Now, it arrives too late to save the sinking credit of the College for liberality, and their doom, which they will become acquainted with next session of Parliament, will not be retarded by the half willing amendments which public opinion and the voice of the profession have wrung from them. A metropolitan board for the regulation of the medical profession will, we have no doubt, before the lapse of many months, be the antidote to their crude and nigardly scheme of reform.

THE QUACKS.

IT is to be hoped that when the legislature takes into consideration the subject of medical reform, it will at the same time bestow a little of its attention on the hordes of quacks who, under various titles, infest this too easily gulled country; to endeavour to abolish them might, perhaps, be an Utopian scheme—a fruitless undertaking. But to restrain them within certain limits—to clip the enormous growth of their wings would not be so difficult an achievement. The fearful lengths to which they may go without punishment under the existing laws, is a public evil which calls aloud for a remedy. The daily, nay hourly, increase too of these motley titled gentry, who beard and

squeeze the sides of the regular practitioner with impunity, ought to be an object of solicitude to any government which cares about that first of all requisites to the prosperity of the community—its health. The march of these disease-retailing and mercenary pests, which was formerly grave and solemn, is now changed to double-quick time. The tribe of Brodums have quitted the stage indeed, but a legion of a more fell description have succeeded. Worm and water doctors, bone-setters, universal pillmen, and a thousand others, advertise their villanous nostrums in our daily papers, promising everything, and too often outraging decency by their disgusting puffs. If the evil must exist, let it do so, in the name of the general safety, under laws which shall restrict its magnitude to the least possible dimensions. Let there be some curb applied to the wild and destructive, though plausible, schemes which are hourly hatching by designing and irresponsible knaves to cheat the public of both their health and money.

Quacks, we are sorry to perceive, are too much promoted and encouraged in this country. Those to whom a conscientious and regular practitioner could not honestly hold forth any hope of recovery are their chief supporters, and in return for their support have their descent into the grave hastened, and often horrible suffering inflicted on them in their way thither. The College of Physicians has endeavoured in vain to suppress the growing mischief: armed with summary powers of fine and imprisonment, it held a sort of running fight with its tormentors for between two and three centuries, but finally gave up the battle in despair. The government support empiricism for the sake of the gains which the sale of

stamps to sanction the nefarious traffic brings. Let the government go a little farther, and, by increasing their fine, change that into a corrective measure which has hitherto been one of encouragement. Let them decree that every quack, of whatsoever title or pretensions, be compelled to take out an annual license, over and above the infliction of the stamp duty, and let the price of that license be proportioned according to the quack's sale of nostrums. This, if carried properly into effect, would act as a considerable check, at least to the smaller fry of the knaves, and afford the regular practitioner a portion of that protection in the exercise of his profession, which his outlay of time and money in his education demands.

APOTHECARIES PRACTISING MEDICINE.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—In your last number, a correspondent (*Pharmaceutes*) has revived the stale argument in favour of the legal right of apothecaries to prescribe for the sick, founded upon the supposed recognition of that right by the preamble of the Act of Parliament, An. 6-7, William III., which your correspondent does not seem to know was made perpetual in the reign of George I. This argument was employed about one or two and twenty years ago by one of the Committee of Associated Apothecaries, in a letter addressed to Sir Francis Milman, and was, I think, sufficiently refuted in a paper entitled "Observations on a Letter addressed to Sir Francis Milman," &c., inserted in the *New Medical and Physical Journal*, vol. v., page 400, *et seq.*, to which paper I would refer your correspondent.

It requires no little ingenuity to prove that the word "attend," which in the first clause of the preamble is applied to the general duties of the apothecary, is, in a few lines afterwards, restricted to the *prescribing* for the sick. Perhaps your correspondent often hears, at present, of nurse-tenders (women employed about the sick), evidently an abbreviation of the term nurse-attenders. In fact there were two descriptions of persons who *attended* the sick during the absence of the physician; an apothecary and a nurse, the former receiving di-

rections from the physician, the nurse from the apothecary.

I am, &c., &c.,

MEDICUS.

British Hospital Report.

NORTH LONDON HOSPITAL.

CLINICAL REMARKS, BY PROFESSOR ELLIOTSON.

GENTLEMEN,—A few days ago a boy was taken to a friend of mine, complaining of pain in the head and stomach. He ordered him a dose of jalap to remove it, which producing vomiting, the creature which I have in this glass was ejected. I have not had time to examine it attentively, but it appears to me to be a common leech. (It was handed round to the class, and resembled a small common leech in every respect, except that its belly and sides had a kind of yellow coating.) It is not a *very* uncommon circumstance for leeches to be ejected from the body, but it generally happens though they may have been small when received, yet they become bloated from feeding on the mucous surface of the stomach. You see, however, it was not so in this case. We do not know how or when the boy took it in, or we should probably have been able to account for this circumstance. There have been many instances recorded of very remarkable things being thrown from the stomach and bowels; and I myself have seen many which were very extraordinary; though you will find that when this is the case they have generally been received externally. I remember a case of a child who, after partaking of some partridge in a state of decomposition, voided twelve live flies, which his mother found in his napkin; another, where a woman who was in the habit of eating cabbage-stalks, vomited two common cabbage caterpillars; and a third, where a girl 11 years of age voided two centipedes within a fortnight, and the second lived three days. Her mother also stated that the girl had previously vomited a black-beetle. There is an account in Heuffland's Journal, of live and dead slugs being ejected from the bowels; and Mason Good mentions, among others, a case in which a live spider was vomited. I mention these cases in order that you may not be alarmed at meeting with such things in practice, as you will generally be able to ascertain how the creatures have been received.

I shall now make some remarks on a case of cancer of the womb, in a woman aged 28, admitted on the 28th of April last. She had had six children, the four last of which had not gone their full time. Indeed, the last time she was not aware that she was pregnant, as she had irregular and copious discharges, which evidently showed a diseased function of

the uterus, and you will often find that functional affections will lead to organic ones. When admitted she was pale and debilitated, complained of bearing down of the uterus, pains in the loins, and a pricking, shooting pain in the abdomen; the lower part of the abdomen was swollen, hard, and tender. The margin and neck of the uterus were hard and swollen.

This disease seldom occurs in a woman so young, and is more frequent in unmarried females, and those who are married and do not bear children, than in those who become mothers; for though the number of cases in married and single women that I have seen are nearly equal, yet, as the number of those women who are married and bear children is much greater than that of the other class, and more cases are not met with among them, of course it proves the unmarried and barren are more subject to the disease. Besides the symptoms I have just named, she had pain in the back and hips, and a very offensive discharge oozed from the vagina, which are all ordinary symptoms. It is not uncommon to meet with tenesmus and strangury, according as the bladder and rectum are implicated in the disease. The stomach, also, has a great sympathy with the uterus, even in a state of pregnancy, much more so when it is in a diseased state, so that we frequently observe great vomiting. The diseased parts also pressing on the rectum, cause great costiveness, as in this case, and by obstructing the passage of the ureters, dilate one or both of them, and one or both of the kidneys, sometimes causing death in this manner. I ordered this woman a diluted solution of chloride of soda, in the proportion of one ounce to eight ounces of water, as an injection to remove the offensive fetor from the discharge, and two grains of the ioduret of iron three times a-day as a tonic, with a pint of porter daily, and nourishing diet; also half an ounce of castor oil to be taken whenever the state of the bowels showed it to be necessary.

A sharp, lancinating, agonising pain accompanies this disease, which, however, frequently almost ceases for long intervals. It did so in this woman, she having suffered less from it for a week or two before her admission here; nevertheless, the symptoms I describe were very distressing to her. But in the soft cancer there is hardly any pain, unless the surrounding parts become tense, when the agony is very great.

On the 30th, only two days after her admission, she was certainly more comfortable; the injection had brought away a quantity of thick, fetid matter, which had distressed her a good deal. On the 2nd of May she was better, the bowels were open, and there were no uterine pains. I ordered the injection to be employed constantly, and the ioduret of iron to be increased to three grains three times a-day. This favourable state continuing until the 19th, I began to think I had been de-

ceived in my examination, and thought of making another. I increased the ioduret of iron to five grains three times a-day, but it produced epigastric pain and heat of stomach soon after. It is one of the most stimulating preparations of iron we have, and I do not know that it is more efficacious as a tonic than the sulphate; it may be given in nearly the same doses, beginning with one or two grains, and increasing to three, four, or five, thrice a-day. The sulphate, however, may be given in much larger doses. I myself have taken twenty grain doses for a considerable time, and administered it to my patients. But you must not do this with the ioduret, on account of its stimulating properties. The dose was decreased to three grains on the 21st. She had a good deal of pain low down in the abdomen, which continued till the 30th. On the 2nd of June she had very little pain, but was exceedingly weak; she continued in this state for a short time and then died. The medicines she took only gave her temporary relief, not having any specific power over the disease.

Some time ago I had a case in St. Thomas's Hospital, in a woman between 40 and 50 years of age, with the same symptoms as this woman, and on examination per vaginam I found the neck and margin of the womb indurated. I gave her narcotics, tonics, aperients, &c., which I knew would give her temporary relief. It was just at the time créosote had been recommended in the foreign journals, and I gave it her in small doses, without any hope that it would do her much good, but merely that she might have the advantage of everything which was at all likely to relieve her. In a week's time she said she was better, of which I took no notice; then, in about ten days more, she said she was a good deal better, and I began to think that she really looked so. She continued getting so much better, that I began to entertain sanguine expectations as to the success of the remedy, when she was seized with cholera and died. I believe I was abroad at the time the body was examined; but they told me that there was no disease of the uterus. I did not place this in some reports I am preparing for publication, the circumstance being so extraordinary that I imagined either those must have been mistaken who examined the body, or else I must have been mistaken in my examination by the vagina, which accoucheurs sometimes are who examine twenty patients in this manner to my one. I remember the case of a lady who sometimes found fæces in her urine, showing a communication between the rectum and bladder. She took tonics and aperients, and went into the country; but not being relieved, I wrote to her medical man that it would be as well to try créosote. He did so, and it had such beneficial effects that she has not discovered any feculent matter in her urine for many months. I mention these to you merely as hints to be worked out. I

should have tried it in the woman I have been speaking to you about, but she was unfortunately one of those who are nauseated even by its smell. In treating this disease, you must support the strength of the patient by tonics, relieve the pain by narcotics, and keep the bowels open with mild purgatives. These of course are only remedies to give temporary relief, there being none that I ever heard of having a specific effect on the disease. After what I have stated, you will use your own judgment as to the administration of creosote.

While exhibiting the diseased parts, the learned professor remarked, that the uterus was not enlarged; that the fundus was almost as hard as cartilage; that there was much induration of the cellular membrane, and no communication with the bladder or rectum. He then proceeded:—

This fatal disease does not produce such enlargement of the uterus as the white fibrous tumour, which is far from dangerous. The tumour is sometimes situated in the substance of the womb; at others under the peritoneal coat, or in the cavity, and produces very great enlargement. Some years ago I saw a young lady affected in this manner, with her uterus pressing up the umbilicus, and she is alive now.

There was a case discharged the other day, which is worthy of your notice, as you might easily mistake such a one, and get discredit by your mode of treatment, or show your ignorance by giving it a wrong name. I allude to Wm. Deboos, aged 19. When I first looked at his chest, which was covered with a red rash, I thought he was suffering from scarlet fever, but there being no headach, pain in the loins, or any other of the constitutional symptoms of this disease, and as the rash was of a different character on the other parts of the body, I saw that I was wrong, and began to look farther, and found that there was tingling of the skin, that when he was first seized his face was swollen, and that there was a bump on the arm. These symptoms convinced me that it was a case of urticaria, though somewhat different from the general forms of this affection, and I asked him if he had been taking anything irritating, knowing that urticaria generally arose from this cause. Now, one of the most irritating articles that young men are in the habit of taking is copaiba, and he denying that he had been drinking, this made me inquire if he had a gonorrhœa, which I found to be the case, and that he had been taking copaiba for its cure.

When a person is affected by this disease, his face is generally much swollen, likewise the interior of the mouth and throat, so that he cannot swallow, and he becomes much alarmed; the skin is red, damask, or the brightest scarlet colour, pretty well covered with bumps, and it burns and tingles very greatly. Emetics are recommended for its cure, but I believe bleeding to be more effectual, as the irritating substance has been

received generally three or four days before the rash makes its appearance; but if it had only just been taken into the stomach, no doubt an emetic would be the most speedy remedy. This youth was bled and purged, which completely cured him. Now if you were to take a superficial view of such a case as this, and call it scarlet fever, you would get discredit, and be looking out for sore throat, &c., which would never appear, and you would find febrifuges do little good, though no doubt if you were to bleed you would get the reputation of curing scarlet fever very delightfully.

Dr. Elliotson stated that he was at present remarking on cases which had been in the hospital; but that very soon he should speak on those in the wards, and give the diagnosis and prognosis before the termination of the disease, which he thought would be more beneficial than his present plan.

We have lately had in the hospital a case of purpura which was interesting, not only as it was a very intense case, but also as it possessed symptoms of a very peculiar nature, which are not mentioned in any of the books I have read, or in any of the cases on record with which I am acquainted, nor have I observed them in any previous case.

Purpura is generally characterised by spots or stains on the skin, of a dingy dark-red, or purple colour, without any elevation of the cuticle, or any secretion either of serum, pus, or blood under it. They are caused by an effusion into the structure of the skin, which sometimes affects the mucous membranes in a similar manner. The degree of danger attending this complaint is very different, some patients going about as if there was not much the matter with them, while to others it proves fatal. It is classed either as *purpura simplex*, or *hæmorrhagica*. Besides the spots, in cases of the hæmorrhagic species, and in severe or protracted simple ones, there is congestion of the lungs or liver, sometimes of both. In the great majority of cases the spots depend rather upon congestion than inflammation of the skin, as the blood or colouring matter, if pressed out, does not return immediately, as it does in inflammation, but it is a considerable time before it is restored; indeed, sometimes you cannot press it out at all. There is, however, a species which is attended with great heat and a sensation of stinging, which Bateman has named *purpura urticans*, or nettle-stinging purpura, which it is evident is of an inflammatory nature, not only from the symptoms, but also that it is relieved by the same remedies as common *urticaria*.

The case on which I am going to remark, is that of a man who was admitted on the 20th of June. He had been a surveyor in affluent circumstances, and had been accustomed to take two or three, and sometimes four or five, bottles of wine every day. Three

years ago he was attacked by inflammatory dropsy, which was cured by copious bleeding. He continued pretty well until three weeks before he was admitted, when he began to feel a sensation of pain in the limbs, and general debility, which rapidly increased. He had also a cough, at first dry, but afterwards attended with expectoration of blood, which was sometimes florid, at others dark. It is interesting to observe this, as it shows that purpura does not always commence in the skin, as in this case you see the hæmorrhage had commenced from the lungs before there was any cutaneous affection. Soon after the spitting of blood commenced, he observed that the arms, legs, and feet began to swell, and that dark purple spots of different sizes appeared on them, attended by tingling and heat of skin. The parts between the spots were of the natural colour, which is generally the case. At length the spots ran together and formed patches, until the whole of the arms and fore-arms, legs, and thighs, were nearly covered. Besides these symptoms, when he was admitted the extremities were tender and œdematous, and there were a number of bullæ on the surface of one arm, numerous petechiæ on the chin, and a large spot over the left eyelid. He was very weak, and continually hawking up blood, sometimes as much as a tablespoonful at a time. The pulse was 120, but so very weak that it could not be felt at the wrist, and the action of the heart was so very feeble that it was difficult to feel its impulses. The tongue was pretty clean; he had great thirst, but no appetite.

Now, the usual plan of treating purpura is to bleed, and purge with colchicum combined with magnesia, which will generally remove it. This case was, however, very different from those generally seen; and as the circumstance of his fall from affluence to poverty, and consequent depression of mind, with the alteration produced on his system by his being compelled to leave off the large quantities of wine he had been in the habit of taking, sufficiently explained, as I thought, the cause of the disease, my plan of treatment was soon formed. I ordered him three pints of strong beef tea, three eggs, and a bottle of sherry per day, with the hope of recruiting his strength, zinc ointment to the excoriations, and fomentations of warm water to relieve the pain in the extremities.

The pathology of this disease is unknown; but it is evident that the whole system is in disorder, the skin only being affected by sympathy, from the congestions of the viscera, hæmorrhages, &c., which are its usual companions; and the nature of the disease being unknown, of course any distinct remedy must be also unknown. Some time ago, the saline treatment was much in vogue. It rested upon the theory that, as alkaline and neutral salts would make black blood florid, and that if all the salts were washed from the blood, oxygen would not do so, and the blood being very

black in febrile disorders, saline medicines would do good by improving the quality of the blood.

As I told you the other day, I do not place enough confidence in this plan of treatment to employ it exclusively, but as it could not do harm with the plan I had adopted, I gave him Potass. nit. Potass. carb. aa gr. xv. every three hours. The report says, that on the next day he was decidedly better; there was no blood either in the fæces or urine; the thirst was less, but the left foot was redder. This state of things continuing till the next day, I was led to hope that he would gradually recover, but he was restless in the night, and at about two o'clock in the morning he insisted upon getting up to the night-chair, though the nurse endeavoured to prevent him. He had sufficient strength to get on it, but he fell back and immediately expired.

On an examination thirty-six hours after death, those spots which during life had been of a bright red colour, had become pale, but the others had retained the appearance they had before death. On cutting into the purple patches, the compression was found to be confined to the skin; there was a small quantity of blood on the dura-mater, and the brain was paler than usual. There were evidences of great disease in the chest. The pleura pulmonalis and costalis were united, and the upper part of the left lung was œdematous; the external surface of the lungs was dark, and small lumps could be felt under it, from which blood could be squeezed; and nearly the whole substance of the lungs was in a state of extreme congestion. Before opening the pericardium, I remarked that I expected the heart would be soft, which we found to be the case, as the fingers could easily be pushed through parts of it. It was enlarged, and there was a good deal of bloody serum in the sac of the pericardium. The external appearance of the liver was very dark, as was the mucous membrane of the stomach, and there were several ulcers near the pylorus; the kidneys were softened, and gorged with blood. The blood was exceedingly black, resembling that of patients suffering from Asiatic cholera.

The case appears to be one of purpura with gangrenous erysipelas, without any tendency to extend to the cellular tissue. There being no effusion of blood, or anything else discovered by the post-mortem examination which could account for his sudden death, there is no doubt, as I said at the time, that he died from syncope, produced by his change of posture, which is very probable from the extreme state of debility in which he was; and indeed it is made evident by the state of the heart, as it is plain that in the state in which we found it, it would be very unlikely to carry on its functions when the gravity was against it. If I had another case of the same kind, I don't know that I should treat it in a different manner, except in being more strict in my orders for the patient to keep in the

horizontal posture, which I would have you observe, as I think, from the favourable manner in which the wine, &c., was affecting him, he would have gradually recovered had he been kept in bed.

DISEASES OF THE DIGESTIVE
ORGANS.

Report of a Case of Cancer of the Cardia, with Dysphagia, severe Intercostal Neuralgia, and Salivary Discharge.

BY DR. SYM.

A COUNTRYMAN, 60 years of age, who indulged too freely in whiskey on market-days, began, in the summer of 1823, to complain of acute pain in the hepatic region: it was worst at first towards the epigastrium; but, after a course of mercury, it abated there, and became much more severe nearly opposite to its original situation, at the right side of the spine, where he could not bear the slightest superficial touch without shrinking. He had also pain in the right shoulder; the urine was high-coloured, and the stools dark before using the mercury, after which they became natural. For some time the disease was regarded as hepatitis; but its obstinate resistance to remedies, and the extreme superficial tenderness of the ribs, extending also to the vertebræ, made me subsequently suspect an affection of the spine. At length difficulty of swallowing supervened; he became subject to a constant profuse discharge of aropy fluid from the *fauces*, the tongue became tender, the articulation indistinct; and for some weeks before his death he rejected his food before it had time to enter his stomach. I wished to support his strength by nutritive glysters, but he pertinaciously refused to receive them, and he died of inanition on the 2d January, 1824. Anodynes and warm baths were the only remedies from which he derived any relief.

January 3, 1824.—*Inspection.*—The liver, kidneys, intestinal canal, lungs, and spine, were healthy. The cardiac orifice of the stomach contained an ulcer as large as a crown piece, seated in the centre of an extensive mass of *scirrhus*.

INSTRUCTION OF THE NATIVES OF
INDIA IN MEDICAL LITERATURE.

THE following letters were addressed to medical gentlemen on the committee now sitting in Calcutta on Native Medical Education.

“These books will help you to form a judgment on the plan of expressing the language of the East in the English letters. If introduced in the Native Medical Department it would certainly facilitate intercourse between Native subordinates of every class and their European superiors, and would form a central point on which both might easily meet. There

are, I believe, even now, few Native doctors who do not aspire to a knowledge of the English letters; and our countrymen of the profession would be encouraged to cultivate a language which from the first they could both read and write.

“If it is thought proper to try the experiment, I shall be happy to turn into English letters any Medical books in the Native languages that may be put into my hands, as well as to print and supply them at prime cost; and if copy-slips and primers are wanted they shall be supplied gratis.

“As Native medical literature is at present quite in embryo, it is well deserving of consideration in what character on the whole it would be best to print it, and it would be a pity to commence building on an inferior foundation when a better is available. One great point is, which character is best calculated to strengthen the alliance between the incipient Native medical literature and its European original, to lead Native students on to the cultivation of the original, and on the other hand to smooth the way of English medical gentlemen to a familiar acquaintance with the Native literature and the Native practitioners.—7th October, 1831.”

“It did not occur to me to mention in my note of yesterday, that as you will have in every part of Hindustan both Mahomedan and Hindu pupils, some acquainted with the Persian and some with the Nagri alphabets, while all will probably learn some English, the English letter system will be an important saving of expense to the Government and of time to the pupils, inasmuch as the former will have to print, and the latter to learn only one character instead of three. In short, the English letters furnish a point upon which English, Mahomedans, and Hindus may all meet and understand each other. The present confusion of letters in the medical institution is preposterous, and it seems as if it were purposely intended to make learning difficult and expensive, to confuse and discourage beginners, and perpetuate the existing barriers to intercommunion of knowledge and sentiment among the different races into which the population of India is divided.—8th October, 1831.”

INFLUENZA IN JAMAICA.

A CORRESPONDENT has informed us that this disease is very prevalent in the town of Kingston, and its adjoining parishes; and that it is of a most serious description. No fatal cases have hitherto occurred, though many at the present time are lying in a very dangerous state; half at least of our population are suffering from its effects. We are in daily expectation of receiving the particular type under which the disease makes its attack; so that in our next we are in hopes to be able to communicate its true characters to the profession.

MISCELLANEOUS.

Owing to the number of medical men with whom the City of Bath necessarily abounds, it has been proposed that the office of physician to the hospital shall be held, not as heretofore for life, but for a given period, so as to embrace a succession of talent.

Medical Responsibility.—Don Carlos, the pretender to the Spanish throne, has issued an order which reflects strongly on the medical profession, and is the greatest insult ever offered to its members. A legitimatist could not have been guilty of such a procedure, and we are rather inclined to think young English surgeons will hesitate ere they join the forces of the Spanish (would-be) tyrant. He has placed under arrest the medical attendants of Zumala-Carreguy, his late general, as if physicians were gods, and capable of preserving life under all circumstances. The ridiculous pretence is, that too large a dose of laudanum was administered previous to the extraction of the ball.—Query, who will judge the question?

The Incubated Egg.—A small shining spot, of an elongated form, with rounded extremities, but narrowest in the middle, is perceived at the end of the first day; not in or upon the cicatricula, but very near that part on the yolk-bag. This may be said to be the abode of the future chick, no trace of which can be distinguished before the beginning of the second day, when it assumes an incurvated form, resembling a gelatinous filament with large extremities, very closely surrounded by the amnion, which at first can scarcely be distinguished from it. About this time the palones enlarge their circles, but they soon disappear entirely, as well as the cicatricula. The first appearance of red blood is discerned on the surface of the yolk-bag toward the end of the second day. A series of points is observed which form grooves, and, then closing, constitute vessels, the trunks of which become gradually connected with the chick; this vascular surface is called *figura venosa*, and the vessel by which its margin is defined *vena terminalis*. The trunk of all the veins joins the *vena portæ*, while the arteries which ramify on the yolk-bag arise from the mesenteric artery of the chick. On the commencement of the third day, the newly-formed heart is discerned by its triple pulsation, and constitutes a threefold punctum saliens. In its first formation it resembles a tortuous canal, and consists of three dilatations, lying close together, and arranged in a triangle. One of these, which is properly the right, is then the common auricle, the other afterwards becomes the left ventricle, and the third becomes the bulb of the aorta. About the same time, the spine, which was originally in a straight line, becomes incurvated, and the distinction of the vertebræ is very plain. The eyes may be distinguished by their black pigments, and comparatively immense size, and they are afterwards remarkable for a peculiar slit in the lower part of the iris. From the fourth day, when the chick has attained the length of four lines, the most important abdominal viscera, as the stomach, intestines, and liver are visible, and a vascular membrane, the *membrane umbilicalis*, begins to form about the navel. This increases with such rapidity, that it covers nearly the whole of the inner surface of the shell during the latter period of incubation. The lungs begin to be formed on the fifth day. Voluntary motion is first observed on the sixth day, when the chick is about seven lines long, or rather more than half an inch. Ossification does not commence before the ninth day, and the rudiments of the bony ring of the sclerotica, resembling a circular row of the most delicate pearls, are first formed. At the same period, the marks of the elegant yellow vessels, the *vasa vitelli lutea*, begin to be visible on the yolk-bag. On the fourteenth day the feathers appear, and the animal is now able to open its mouth for air; if the shell of the egg be broken on the nineteenth day, it is able to

utter sounds, and on the twenty-first to break through its prison, and to commence a new state of life.

APPOINTMENTS.

General.—Dr. S. Hughes, J. Bluck Lye, M. S. Walrond, and W. S. Gilliland, consulting physicians, and Messrs. Philip James, John Gilliland, F. Braithwaite, Thos. Pritchard, C. H. Higgins, H. C. Barnard, and H. Bird, visiting surgeons to the Hereford Dispensary. Mr. Charles Nairne, of China-terrace, Lambeth, apothecary to the Lambeth Asylum for Female Orphans.

DEATHS.

Mr. John Tomlinson, surgeon to the County of Kildare Infirmary. At Cheltenham, Mr. R. Gibbon, late superintending surgeon of the Madras Medical Establishment. Mr. Wm. Clarke, of Morpeth, surgeon. Mr. Wm. Gibson, of Montrose, surgeon.

WEEKLY BILL OF MORTALITY.

London, Tuesday, July 7, 1838.

Abscess	1	Inflammation	36
Age and Debility	36	Inflammation of the	
Apoplexy	1	Bowels & Stomach	1
Asthma	23	Inflammation of the	
Cancer	1	Brain	3
Childbirth	8	Inflammation of the	
Consumption	70	Lungs and Pleura	6
Convulsions	25	Jaundice	1
Croup	4	Liver, Diseased	16
Deftition, or Teeth-		Measles	23
ing	7	Mortification	6
Diabetes	1	Paralysis	2
Dropsy	11	Small Pox	15
Dropsy on the Brain		Spasms	1
Dropsy on the Chest	1	Stone and Gravel	1
Fever	14	Thrush	1
Fever, Scarlet	1	Tumour	1
Fever, Typhus	2	Unknown Causes	4
Heart, Diseased	1		
Hooping-Cough	15	Stillborn	23

Buried, Males 190 Females 185 Total 375
Increase in Burials reported this week, 110.

BOOKS RECEIVED.

Quain's Anatomical Plates, Fasciculus I. of the Arteries.

The plates are ably executed, and present a clear and graphic view of the vessels. The letter press deserves as high an encomium.

Lectures on the Diseases of the Lungs and Heart. By THOMAS DAVIES, M.D. 8vo. pp. 512. Longman, 1835.

Andral's Clinique, Part II., containing Diseases of the Chest.

CORRESPONDENTS.

Australis.—The terms on which the South Sea whalers engage their Surgeons are by the "ley," not by pay. The "ley" means a certain proportion of whatever cargo of oil the vessel may obtain during her voyage. The surgeon's proportion is generally one-hundredth, a little more or less, according to the liberality of the owners. The duration of a South Sea whaling voyage is generally from thirty to thirty-six months.

Acies.—The slanderer he points at is not the party suspected.

B. R.—If he is not a buffoon or a hypocrite, he is an ass.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

*At Sir Patrick Dun's Hospital, during the
Session of 1834-5.*

LECTURE XX.

GENTLEMEN,—I shall speak to-day of some prescriptions which I am in the habit of using in the treatment of fever. In the treatment of fever it is frequently of importance to gain time, and periods will occur in every long fever, in which there may be no direct indication for the exhibition of any powerful remedy; at the same time, such is the ignorance of non-medical persons, and the anxiety of the patient's friends is so intense, that they cannot imagine how it is possible for an attentive physician to let twelve hours pass away without doing something. The mere circumstance of seeing the fever going on, is sufficient proof to them of the necessity of making renewed efforts for its removal. This, however, is very excusable. If any of you, gentlemen, happened to be ill, I dare say you could scarcely bear to pass many hours without taking something which you supposed might prove either immediately or remotely useful. Consequently, we could not treat fever in a satisfactory manner without medicines of what may be termed an expectant character, and calculated to fill up the spaces intervening between those periods when active treatment is necessary. You are not to suppose that in ordering such medicines you are acting a dishonest part, and practising a deception unworthy of your profession; on the contrary, your conduct is perfectly just and proper: and though you were convinced that no medicine is required, still it will be necessary to prescribe something, if you do not wish to lose the confidence of the patient and his friends. Again, if at a period when you say that no medicine is necessary, and when the patient has passed twenty-four hours or two days without taking anything, an unexpected turn in his disorder should take place,

people will be very apt to say, either that you did not know what to do, or that you took no steps to obviate the threatened change, and that one or two days were completely lost. Conduct like this has frequently brought down a great deal of censure on medical men. It may be said that these are mere prejudices, and above the dignity of a man of firm and consistent character; but when prejudices are intimately blended with human nature, and constitute as it were a part of it, it is much better in many cases to submit to them, particularly when compliance does not involve a sacrifice of principle. In cases of acute disease of any considerable duration, and especially in private practice, there are periods when medicines of an expectant and tempering character must be employed, and hence the introduction of a class of remedies extensively used in fever and other complaints, and generally denominated palliatives. These are remedies which have a general tendency to assuage thirst, act as diluents, gently promote the secretions of the skin, intestinal canal, or kidneys, and which are known to possess at least the negative quality of doing no harm. They are most commonly prescribed in combination with a considerable quantity of fluid, and hence are administered either in the form of draught or mixture. The medicine in most general use among the physicians of Dublin is one which was introduced by Dr. Cheyne. It is prepared by dissolving a drachm of carbonate of ammonia in three ounces and a half of water, with as much lemon juice as will saturate it; the mixture is then sweetened with syrup of orange peel, and given in doses of two tablespoonfuls every third or fourth hour. In this way a solution of the citrate of ammonia is formed which possesses the properties of a mild anti-febrile, and gently stimulant diaphoretic.

Now it cannot be denied that this mixture answers the purposes of an expectant remedy, calculated to pass away the time, and do no injury; but it appears to labour under one considerable disadvantage, it is not agreeable to the taste. If you taste the citrate or acetate of ammonia, you will find that its flavour is by no means pleasant, and I need not tell you

that in cases where there is no actual indication to be fulfilled, it is of importance to have something that will not be disagreeable to the patient. Feeling, therefore, the necessity of altering this prescription, I have lately introduced another, which I am happy to find has been extensively adopted, and which is formed by substituting the carbonate of soda for the carbonate of ammonia. The mode in which I generally employ it is the following:—carbonate of soda, a drachm; water, four ounces; lemon juice, a sufficient quantity to saturate the alkali; syrup of orange peel, half an ounce; tincture of orange peel, two drachms. A little more than an ounce of lemon juice will be sufficient to saturate this quantity of carbonate of soda, whereas it would take from two and a half to three ounces to saturate the same quantity of carbonate of ammonia. If you wish to have a weaker solution, and I believe it is the better way, you can dissolve a drachm of carbonate of soda in five ounces of water instead of four. Nothing can be more agreeable in flavour than this mixture. The citrate of soda which is formed, does not, it is true, exert any active influence on the animal economy, but it partakes in the properties of neutral salts, determines gently to the kidneys, tends to keep up a soluble state of the bowels, and forms a most grateful and refreshing beverage. The syrup of orange peel gives the mixture an extremely pleasant flavour, and this is further heightened by the agreeable aromatic bitter of the tincture. Since I commenced using it, I have found it to answer all the necessary purposes extremely well, and I can recommend it to you with confidence.

I shall now speak of the principles which guided me in prescribing for a young woman in the Chronic Ward, named Catherine Roach. I am anxious to make a few observations also on her case, as it belongs to that anomalous and frequently unmanageable class of female complaints, which puzzle the practitioner so much, and which he is so often called on to treat. The most prominent feature in the case of this young woman, who is of stout make, considerable embonpoint, and rather healthy appearance, is retention of urine. Retention of urine occurs much more frequently in young and tolerably healthy females than in males at the same period of life. It is very rare to meet with retention of urine in males under thirty, except in cases of fever, or disease of the urinary passages; in a healthy person, and who is going about in the usual way, it is never observed. This, however, is not the case with females; young females, apparently in good health, and going about as usual, not unfrequently suffer from retention of urine.

The history of this girl's case is briefly as follows. About twelve months ago she was treated in Mercer's Hospital for fever, during which she laboured under retention of urine; this disappeared with the return of convalescence, but after some time it again attacked her, and has appeared at intervals ever since,

being sometimes absent for weeks, and sometimes only for a few days. You perceive then it is quite evident from the history of the disease, from the circumstance of its being unaccompanied by any local inflammation or change in the part affected, and from its occurring during the course of fever in which the brain, spinal marrow, and other parts of the nervous system were engaged, that the retention of urine must here depend solely on a nervous cause. It is in fact a species of temporary paralysis of the bladder, arising from the nervous influence by which the motions of that organ are regulated, being subjected to occasional disturbance. This affection of the bladder is of frequent occurrence among hysterical females, and is sometimes met with in persons who appear to have no other disease. It is also very apt to continue for a long time; I have seen it last for months, and require the daily use of the catheter.

In this case the origin of the disease did not appear to have any connexion with the discharge of the uterine functions, the catamenia were regular, and there was nothing connected with the state of the uterus on which it could be supposed to depend. But on inquiring carefully into the history of her complaint, we found that ever since she had laboured under fever, she had experienced a train of symptoms indicating that the derangement of the nervous system which then occurred had never completely subsided; she complained of pain in the head and loins, want of appetite, constipation, and tympanitis, symptoms which all indicated that a considerable degree of nervous derangement still existed,—in other words, that the affection of the nervous system which accompanied her fever had now become as it were chronic, and, with the chronicity, had assumed the intermittent character of nervous diseases.

I shall now explain briefly the mode in which I treated this case, and the reasons which induced me to prescribe the remedies employed. In the first place, it was necessary to remove and obviate constipation. My object here was not merely to keep the bowels open, but also to give such medicines as would agree with the stomach and lessen the tendency to tympanitis. Now if, in addition to these purposes, I could accomplish another very important object, namely, to strengthen the tone of the nervous system, and effect an alteration in its mode of action, I considered that I should fulfil all the required general indications. I therefore ordered an electuary, which I have been much in the habit of using in similar cases, and from which I have often derived remarkable advantage.

R. Electuarii sennæ, ℥iij.
 Bitartratis potassæ
 Sulphuris loti
 Carbonatis ferri
 Syrupi zingiberis, q. s.
 Ut fiat electuarium. Sit dosis cochleare
 minimum ter quotidie.

I am sure every gentleman present understands the principles on which each ingredient of the foregoing combination was prescribed. The electuary of senna, or, as it is usually termed, the lenitive electuary, by its mild but extensive operation on the digestive tube, forms an excellent basis for a combination like this. The carbonate of iron was ordered, because it was obvious that the young woman laboured under considerable derangement of the nervous system, requiring the salutary influence of a tonic calculated to strengthen the nerves, and thus gradually restore them to their healthy and normal action. Besides, we know that in cases where persons labour under a relaxed and debilitated state of the digestive organs, giving rise to tympanitis, constipation, and want of appetite, the carbonate of iron, by giving additional vital energy to the intestinal tube, tends not only to restore appetite, but also to check tympanitis and promote defecation. You perceive, then, what my motives were in giving the carbonate of iron; but as, in such cases, there is always more or less irritation and excitement of the nerves, it will be necessary to temper the action of the carbonate of iron, lest, by proving too stimulating, it may do more harm than good. I combined, therefore, with it a neutral salt of aperient and cooling properties, the supertartrate of potash. It might be objected here, that an error was committed in prescribing remedies which are chemically incompatible, and that so far the combination was imperfect; but it may be observed, that the supertartrate of potash is soluble with difficulty; and, besides, even supposing that decomposition actually does take place, and that we have a tartrate of iron and a carbonate of potash formed, still we know that the tartrate of iron is an excellent chalybeate, and experience teaches us that the new combination forms an active and valuable remedy. To these ingredients we added sulphur, to act on the skin and the mucous surfaces of the lungs and digestive tube. You will recollect that this girl had frequent attacks of tympanitis, which consists in an effusion of air into the intestines, produced by a frequently recurring congested state of the bowels. Now, strange as it may appear, sulphur, though apt to induce a secretion of sulphurated hydrogen from the intestinal mucous membrane, and thus give rise to flatulence, exercises by its gently stimulating and alterative effects a remarkable influence over morbid secretions of air from the bowels, and so far the homœopathic doctrines seem to be borne out. It certainly appears singular that sulphur, which is a stimulant, and which generally increases the gaseous secretions of the digestive canal, should have a tendency to remove congestion and diminish flatulence; but I appeal to experience and analogy for the truth of this opinion, and refer to its use in another form of disease where congestion and flatulence is always

present, namely, in cases of hæmorrhoids. So much for the reasons which led me to prescribe this combination.

In ordering this electuary you should give directions (and this is a point never to be neglected in treating female complaints) to the patient to attend carefully to the effect of the remedy. If a teaspoonful three times a-day is sufficient to keep up a gentle but full action of the bowels, there will be no necessity of changing the dose; but if this is not enough, it should be increased, or it may be quickened by the addition of a small quantity of jalap or electuary of scammony. This, however, should be done cautiously, because in such cases your object is not to purge briskly, but merely to maintain a soluble state of the bowels. When the use of this electuary has been persevered in for some time, and when the patient takes it regularly, and knows the exact quantity necessary to produce one or two loose evacuations in the day, it is surprising how favourably it will act. It regulates the bowels, invigorates the tone of the intestinal mucous membrane, increases the appetite, improves the strength, and restores the healthy action of the nervous system. In the case before us it has proved eminently serviceable.

So far with respect to our attempts to act on the system generally; a few words now with respect to the local treatment. In the first place, with the view of strengthening the tone of the bladder, and promoting the expulsion of urine, we gave fifteen drops of the muriated tincture of iron (liquor muriatis ferri p. d.), in an ounce of camphor mixture three times a-day. The reason for prescribing the muriated tincture of iron is so obvious, and it has been so frequently employed for similar purposes, that it is unnecessary to say anything in the way of explanation. In addition to this, I ordered a large vessel of cold water to be poured over her back and loins every day. This practice has often proved very beneficial to nervous females; it has in many cases restored the power of the bladder and improved the functions of the uterus; it also exercises a remarkable influence over the digestive system, and, like sea bathing, is an excellent remedy for constipation. In order to ensure its full effect, you should order the patient to place her feet in warm water, and have the cold water poured from a considerable height. Like many other remedies of a similar kind, it is difficult to explain its action, but experience has shown that it is extremely valuable. We next prescribed such remedies as contribute to promote the secretion and evacuation of the urine, and, lastly, we have given a combination of tonics and stimulants. To-day I have ordered the following draught, to be taken twice daily:—

R. Decocti foliorum buchu, ℥j.
Tincturæ ejusdem, ʒss.
Spiritus ætheris nitrosi, ʒss.
Tincturæ cantharidis, ℥ij.

Fiat haustus.

I need not tell you, gentlemen, what the properties of buchu are: it is gently stimulant, sudorific and diuretic; it acts as a tonic on the urinary system, and in chronic affections of the bladder has proved extremely useful. Of the sweet spirit of nitre it is unnecessary for me to say anything, but a few remarks on the action of cantharides may not be improper. Being convinced that in this case the retention depended chiefly on temporary paralysis of those muscular fibres by means of which the bladder is enabled to evacuate its contents, it became necessary not only to act on the general system, but also on the parts affected, and we know from experience that cantharides exert a stimulant effect on the whole urinary apparatus. The tincture of cantharides, however, should be given with caution, and only in small doses, as it is apt to stimulate too powerfully if prescribed in large quantities. I should, however, have no objection that it increased in this case the pain which the patient experiences in passing water, as it is necessary to have some symptoms present indicating its action on the bladder. A small quantity, however, is generally sufficient in all cases of this description, and I have seen very good effects from doses of two drops three times a-day.

While I am on this subject, permit me to speak briefly on an opposite state of the bladder, which is frequently observed in very young persons. A boy, perfectly healthy, but of a nervous temperament, studious, and extremely anxious about his lessons, is subject from his infancy to pass his water under him in bed. He is, suppose, arrived at the age of six or seven years, and has no disease; but still this habit sticks to him, and cannot be removed. The irritability of his disposition has been increased by injudicious correction; he has been taken up at night and whipped; he has been ridiculed during the day; his infirmity has been made known to his companions, who call him nicknames; and in this way the habit has been rather confirmed than removed. Now you may happen to be consulted about such a case, and be asked whether it can be relieved or not. The matter appears, perhaps, trifling and ridiculous, but you may get more credit by curing a bad habit of this kind, than by removing an acute disease. Now what are you to do? In the first place, you must remove the boy entirely from all companions of his own age, who are acquainted with his bodily infirmity. In the next place, you must not allow him to be corrected or reproached, and you must adopt every moral means to diminish general irritability. The boy should not be too much confined; he should not be allowed to apply too closely to his lessons; and he should have generous diet, good air, and sea-bathing. On these general principles I have cured several very obstinate cases with the use of infusion of buchu, with tincture of cantharides, in small doses. With respect to the use of cantharides, it struck me

that the same medicine which would have the properties of stimulating in large doses, might, when given in small quantities, have the property of increasing the tone of the bladder, and perhaps altering its mode of action; nor in this expectation have I been disappointed. In a number of the *Dublin Medical and Chemical Journal*, I have spoken of a remedy which appears to be adapted to such cases, namely, the *Lycopodium clavatum*, which grows on the Dublin mountains, and which is said to have stimulant and diuretic properties analogous to those of the *Diosma crenata* and *Arbutus uva ursi*. It appears to be a remedy well adapted to cases where there is a chronic irritability of the bladder; and it is stated by some German writers, that it has produced very good effects in many chronic catarrhal affections of the bladder. I have not, however, time to speak of its properties at present, and beg leave to refer you to the paper in which I have spoken of it, which you will find in one of the late numbers of the *Dublin Medical and Chemical Journal*.

A woman, named Anne Scarlet, was admitted on Saturday, concerning whose case it may be necessary to make a few observations. She states that she has been ill for the last eight days, and that her illness originated in cold, preceded by rigors, and followed by feverish symptoms. The general pyrexia had subsided at the period of her admission; but she had some symptoms worthy of attention. Her pulse was 72, and regular; her skin rather cool, and her bowels natural; but she complained of acute pain in the left side, which, she said, came now and then, catching her breath, and preventing her from taking a full inspiration. This pain was so intense, and seemed to affect respiration so considerably, that, looking to its situation and its effects, you would at first sight be inclined to think that it arose either from pleurisy or pericarditis. On examining the chest, however, by the stethoscope and percussion, we found the sound was clear and normal: there were no râles present, and the respiratory murmur was heard distinctly over the whole lung. In fact, auscultation showed that the cause of the pain was not connected with pleuritis, pneumonia, or pericarditis. What then was it? A variety of pleurodynia, well worthy of your attention, as being connected in her case with retention of the milk and engorgement of the left mamma. At the time she was attacked with cold, she happened to be only a few days after childbirth: the feverishness which ensued obliged her to give up nursing, and in this way a sudden and unnatural check was put upon the secretion of milk. When an occurrence of this kind takes place, and proper means are not taken to obviate the mischief, a high degree of local irritation is the consequence, producing inflammation of one or both the mammæ, which, if not treated well and energetically, will certainly end in mammary abscess.

What I wish to draw your attention to, however, at present, is this,—that inflammation of the mamma, arising from retention of milk, is very apt to be attended with pleurodynia in one or more parts of the chest. The flow of milk to the breasts, three or four days after delivery, is very often accompanied by flying pleurodynia, and the formation of mammary inflammation, from the arrest of the lacteal secretion, is also very frequently attended with fixed pains of a pleuritic character.

The treatment adopted in this case was very simple. In the first place, you endeavour to check the determination of fluid to the breast; and for this purpose you exhibit a purgative of an hydragogue kind, calculated to act briskly on the bowels. We gave a combination of infusion of senna, sulphate of magnesia, tincture of senna, and electuary of scammony, which acted six or seven times on the bowels, and tended materially to relieve by derivation the mammary congestion. In the next place, we directed our attention to the breast, and endeavoured to remove the milk, by the use of the syringe employed for that purpose. The milk may be removed from the breast by means of the syringe, or by sucking with a breast-bottle, and where the tenderness of the part is so great that neither of these modes can be employed, the next best means is diligent fomentation. This produces a constant oozing from the breast, and if the fomentation employed be made with a decoction of poppy heads, it has considerable effect in abating pain and inflammation. We also applied leeches in this case, not with the view of removing the pleurodynia, but with the intention of removing its cause, mammary inflammation. By the use of means directed to the breast, you will find that we can remove all symptoms of pleurodynia, and that the pain and difficulty of breathing will soon disappear. This is a simple case, but it is one of frequent occurrence, and it requires some tact and management for its successful treatment.

To-morrow I shall speak on some other matters connected with the treatment of fever, and shall give some extracts from a pamphlet on the medical effects of the chlorides of lime and soda, published some time ago by the Archbishop of Cashel, an erudite scholar, an accurate chemist, and an excellent man. You have frequently, since the commencement of the present epidemic, seen me use the chloride of soda in the treatment of fever with the best effects. Indeed we have much cause to congratulate ourselves on the happy results of our fever treatment. Since the commencement of the session, there has been a vast number of cases in the hospital, some mild, but many very doubtful and dangerous; yet we have not as yet lost a single patient. This is a circumstance well calculated to excite agreeable reflections. It is also pleasant to recollect how plain and simple our mode of treatment has been. You have probably observed that, in

the treatment of all the cases that came before me, I have not prescribed altogether a dozen grains of calomel; that I have very seldom ordered any kind of purgative medicine; that I have been sparing in the use of leeches and cupping, and that I have not ordered a single patient to be bled. This I am sure will appear strange to the various sects of pathologists and theorists whom I have seen, like so many waves succeeding each other, and whose doctrines were equally doomed to break on the solid and immoveable shore of truth. I recollect how each doctrine arose, and made converts, and influenced practice; how each had its day, and then sank into that obscurity and neglect to which vain and profitless speculations are always destined. I recollect when it was the custom to commence the treatment of fever, by prescribing ten grains of calomel, to be followed by a bolus containing fifteen grains of jalap, or by a large draught composed of infusion of senna, epsom salts, and electuary of scammony. I remember the time when it was the fashion to bleed every case of fever which came into hospital, no matter what the stage of the disease might be, or what the condition of the patient was at the time of admission. I recollect, too, when the prostration and weakness which accompanies local inflammation, particularly of the digestive system, used to be treated with wine and stimulants. In fact, so great was the difference of opinion among medical authorities, and so discordant was the practice employed, that an able and honest man declared, in a pamphlet published about sixteen years ago, that the treatment of fever was nothing but a farce, and that as many would recover under one form of treatment as under another; or, in other words, that as many persons were killed by one form of treatment as by another. This appalling announcement of the truth met the public eye, and it was further confirmed by observing that the poor, particularly those located in remote country districts, who had little or no medical attendance, died in much fewer numbers than the rich who lived in towns or in their vicinity, and who had every attention paid them which professional skill could devise. Various explanations of this dreadful fact were given; and among the hallucinations of the day was the statement, that a poor wretched being, who lived on bad food, who ate nothing but potatoes and milk, or probably salt, and who was addicted to habits of intoxication, was better calculated to bear fever than the man who lived well and led a regular life. The truth, however, is, that the rich were killed by the *nimia diligentia medicorum*, and the poor, who had nothing to look to (to use a quaint expression of Dr. Ruddy) but the providence of God, escaped. It is certainly an undeniable fact, that those who had plenty of medical attention, and took a great quantity of medicine, frequently died; while those who had no attendance, and took scarcely any thing but water, generally recovered. Any observant

practical physician, who is in the habit of treating fever, knows that there is no single principle on which it can be treated successfully. Every epidemic is peculiar and distinct in its nature, and each consequently requires a distinct and peculiar mode of treatment. Hence the necessity of studying fever unbiassed by any preconceived notions, and independent of the trammels of dogmatism. With a person who observes in this way, who studies the disease as it is, and not as it is described; whose practice is regulated, not by the doctrines of the schools, but by the results of investigation, carefully weighed and considered; with such a person, the treatment of fever will be simple and successful, and I believe that there is no disease in which success so much depends on treatment as fever. It is difficult to explain how it came to pass that a contrary opinion could be promulgated in Dublin. Something must be attributed to the neglect or incapacity of those whose duty it was to teach the truth. The chief cause may, however, be traced to the activity and zeal which inspired some not only to uphold their own branch of the profession, but to decry, I had almost said to defame, that which they were pleased to call *pure medicine*. With characteristic inconsistency, however, these gentlemen, who declared that the treatment of fever was at best useless, readily engaged in its management in private practice, and while they professed openly their disbelief in the efficacy of any medicines, they busily employed themselves in prescribing pills and draughts without number for their own fever patients. That they thought their treatment of some value, might be gathered from their acceptance, their invariable acceptance of pecuniary remuneration from the sufferers' grateful friends, who little dreamed the while that the hands which, with automatic movement, so readily grasped their fees, belonged to persons who held, nay, who maintained the opinion that the treatment of fever was all a farce! Posterity will scarcely give credence to this fact, and will probably refuse to believe that such an opinion could have been advanced in what we are pleased to call an enlightened age, and an enlightened city. They will scarcely think I speak the truth in assuring them that a spirit of medical intolerance existed to such a degree at the time of the discovery of the stethoscope, that whoever in Dublin actively occupied himself in verifying the researches of the immortal *Laënnec*—whoever availed himself of the new resources invented by this great physician, was sure to become an object, not merely of dislike, but of animadversion and ridicule on the part of those who ought to have exerted their influence in endeavouring to advance, and not retard, the progress of science. Happily for the character of the country their endeavours have been frustrated, and the cause of truth has triumphed. Happily for the students and their future patients, those teachers are now most followed who best ex-

plain, and most diligently illustrate the phenomena observed by means of mediate auscultation.

INTRODUCTORY LECTURE

TO THE

SCIENCE OF COMPARATIVE ANATOMY.

Delivered at the Westminster School of Medicine.

BY THE LECTURER ON COMPARATIVE ANATOMY AT THAT INSTITUTION.

GENTLEMEN,—In presenting myself before you as Lecturer on Comparative Anatomy, it is not my intention to launch out into the fields of rhetoric, or to clothe the facts it will be necessary for me to explain, in a splendid mantle of high sounding words. No, gentlemen, mine is the humbler task of a teacher, not the arduous duty of the orator; my aim shall be, therefore, rather utility, than an ostentatious display of eloquence.

The science which I am about to inculcate, it is true, admits of the aid of glowing and impassioned language, and possesses within its ample domain beauties of no ordinary stamp; the symmetry and proportions of animated nature, together with their nicely balanced functions, the rise and fall, the origin and decay, of certain organs in various forms, and the proof that no particular organ is in itself essential to life. It will be my duty to show you, the curious disposition of the various parts, not of *one* animated body, but of the whole range of living things, whether they walk the earth, exist within its substance, inhabit the depths of ocean, or soar in the air. It will be my duty, I repeat, to explain to you their component parts, and to trace them from a state of incipient development in some animals, to their full expansion in others; to mark out the distinctive characteristics, as well of the meanest reptile that is scarcely seen crawling on the surface of our globe, as of the majestic and stupendous elephant, who shakes it with his tread; to lay open, in short, before your eyes, the mechanism of all created beings, and introduce you to a museum, in which whatever is endued with life, motion, and sense, constitutes the spectacle. Gentlemen, a science which claims so wide a kingdom, and embraces, I may say, if not innumerable, almost innumerable facts, you will confess cannot but demand much time in its development, and that lucid arrangement in the unfolding of it, which may tend to render its difficulties lighter, and to facilitate its acquisition. To accomplish the latter desirable end, I propose delivering, in the course of this season, sixteen lectures, which may be termed introductory to the science, since in them I shall not so much enter into its details, as endeavour to form a striking and comprehensive

outline of the whole, so that a fair view having been given of its extent and bearing, the more minute and particular descriptions entered into during the next session may be better comprehended and remembered. In reflecting on the subject, this has appeared to me to be the most eligible mode of proceeding, for when once a well-defined and intelligible picture of the aggregate has been exhibited to the mental vision, the separated parts are more easily referred to afterwards, and their peculiarities and distinctions better understood, and retained in the memory. Feeling thus, gentlemen, I must claim your indulgence should my efforts to render clear any portion of my subject appear to you to be unsuccessful, and I crave the boon with more confidence of its being granted, from knowing, first, that I have exerted myself to the utmost in order to avoid such a failure, and in the second place, permit me to add, from being convinced that the generosity which ever animates such an assemblage of worth and talent as that which I now have the honour to address, is prone to judge favourably, where the difficulties in the execution are great, and to condemn unwillingly.

Having said thus much, gentlemen, I now proceed to my subject, and in the first place will endeavour to trace some of the sources from which comparative anatomy or zootomy (which may be defined to be that science which teaches the difference of structure in man and the inferior animals) derived its origin. In attempting this we are not left altogether to vague surmise, as occurs in exploring the origin of most other sciences, for in the sacred writings we are informed that the sons of our first parents offered up sacrifices of animals, long before animal food was permitted, and in doing this a division of the parts became necessary, since some were deemed impure and cast aside, while others were adopted as fit for the solemnity; proceeding on, we may conclude that when the world became more peopled, and wars ensued, the wounds inflicted by the coarse and barbarous weapons used, must frequently have exposed to view the internal structures of man in a greater degree than is the case in present times: the slaughter and division of the larger animals occurring at the same period, could not fail to strike the beholders with something like a comparison between their parts, and those of man. As civilisation advanced, and men became more secure in the enjoyment of their ease, new wants arose, and embalming, as practised by the Egyptians, might have added something to this kind of knowledge; not, however, much, since we find, from the writings of Herodotus, that the embalmers were obliged to draw out the internal parts piecemeal, in order to avoid mutilating the body. Enough, nevertheless, must have been learnt in this way to demonstrate the analogy between the structure of man, and the inferior animals.

The soothsayers and augurs, whose importance among the ancients was very great, could not have done much in the advancement of the science, for their examinations were confined to the great cavities of such animals as they slaughtered, and a simple inspection of the bowels made, from which they pretended to extract their prophecies. In some work attributed to Hippocrates, there is a tolerably exact parallel between the chylopoietic viscera of a man and a dog. In the third and fourth century before the birth of our Saviour, anatomy was certainly cultivated among the philosophers. Plato reasons on this science; and his contemporary, Aristotle, undertook a natural history of the form and structure of animals, at the command of his pupil, Alexander the Great, and seems to have illustrated his descriptions by drawings, an improvement of vast utility.

Zootomy is a term which is frequently given to comparative anatomy, and, in fact, it is the one which implies the demonstration of the science. It is so called from ζῷον, "an animal," and σκεψισ, "to cut," while, on the contrary, the term comparative anatomy, which was given by Vicq-d-Azyr, is more intended to express the multitude of comparisons which we shall find existing in the structure of different animals, and was first so called from a comparison between the organs of inferior animals, and those of the human body.

The differences that exist between what are termed the general sciences and natural history, I shall not this evening consider to any extent, but briefly remark, that in the former, man has some control over the conditions of the phenomena which he studies, but in the latter, the phenomena are not within his grasp; he can decompose and analyse them only by reflection and deep meditation.

On reflection, when we consider what a variety of conditions are necessary to animal life, we may at once almost conceive the everlasting task in endeavouring to detect the phenomena which support it.

The structure of all living bodies may be termed a porous texture, by which plates of a fibrous and solid nature, more or less flexible, intercept fluids more or less abundant, and this is called organisation. Now none but organised bodies are susceptible of life; every organised body has a form peculiar to itself, and is peculiarly adapted to its wants and habits.

The science of comparative anatomy I have said to be one of very ancient origin, though until very lately it has not received its due cultivation. We observe from the oldest historical records we possess, that sacrifices of animals were offered to the deities by the priests of the Israelites, the Egyptians, and the Greeks. Moses, nearly six and thirty centuries ago, described the method of conducting these sacrifices among the Israelites, when calves, lambs, pigeons, doves, &c., were offered to the Deity as an atonement for the sins of his people. At this ancient period,

however, we must not give them credit for more than ordinary observation, though Homer, in his poems, informs us that they possessed an intimate knowledge of the internal parts of many of the lower kind of animals. They possessed undoubtedly a knowledge of the position of the larger organs, they inspected the difference of appearance of the same organs in different animals; they were able, in a word, to distinguish a healthy organ from one that was in a great state of disease. Their object, however, was not for any rational pursuit; they merely wished to survey one or two of the larger organs, particularly the heart and liver, since from these organs their signs and omens of future events were taken. Indeed it is surprising that from the curiosity the internal parts of different animals must have then excited, that they did not cause more acute observation; but in those darkened ages, superstition and bigotry domineered over every science; the kings and priests, incited by artful knavery, did all in their power to check even the means of observation.

The first who appears to have examined the internal structure of the lower animals with a scientific view, is that eccentric but acute philosopher Democritus, a few hundred years before the birth of Christ. It is said, that when he retired into the unhealthy forests of Abdera, he selected a spot under a tree, where he was in the habit of sitting, surrounded by a number of animals for the purpose of dissection. Hippocrates, his contemporary, here visited him in his solitude, and acknowledges that he gained much information from the researches of this anatomical observer. This lover of medicine (Hippocrates), who afterwards gave much of his time to anatomical studies, describes the brain to have been a sort of cooling apparatus, to condense the fumes arising from other parts of the body; but in a letter which Hippocrates received from Democritus, the latter therein stated that the brain was the true seat of the operations of the mind. Pythagoras and Empedocles directed also their attention to the internal structure of animals. The Egyptian priests possessed also at a very remote period many opportunities of examining the viscera of different animals, as in that country some of them were worshipped as deities, and kept after death embalmed in the pyramids. We have frequently from these ancient monuments many of those animals brought to Europe in a state of high preservation. Geoffrey St. Hilaire brought, both from Upper and Lower Egypt, mummies of various kinds of animals. Herodotus and Diodorus Siculus have given some very interesting accounts both of the process of embalming and of the sacrifice of animals among the Egyptians.

Aristotle, who had every advantage afforded to him for the study of comparative anatomy a man could well possess, may be considered

the first who made real progress in this science. His writings prove him to have been thoroughly acquainted with the animal machine, and to have been a man of very great research and deep observation. Few have been able to surpass some of his descriptions, and even Baron Cuvier asserts that many of them excelled those given by Buffon.

From Pliny, whose works contain all the information of the age in which he wrote, and from the few facts of comparative anatomy his works contain, we may easily perceive the slow progress the science made during the long interval between these two philosophers. The science for many years, in fact, was dwindling away; and it was not until the sixteenth century that it was again cultivated. Columbus and Aldrovandus then pointed out the importance and practical use of this science, and opened a path for its future cultivation. The science has, since then, been gradually developing; but it was not until after the eloquent writings of Thembly, Rossel, and Ellis, that comparative anatomy was made a distinct branch of science; previous to this it had become mingled with some of the general sciences, but more particularly human anatomy. The countries that have most contributed to the progression of this science are Germany and France. Why we have been so slow in facilitating its progress is somewhat difficult to explain, for there is no country that possesses more opportunities than we do. We have, in almost every part of the world, territories of our own; there is scarcely any part of the world that we dare not penetrate; but yet, from negligence, or for some no better cause, we have been the most scanty contributors. It is true that the labours of our countrymen have extended the boundaries of the science in, I may say, many of its departments. We are indebted to Hewson, Douglas, and more particularly to the immortal Hunter, for unfolding the darkened veil respecting the laws of animal organisation, and pointing out the utility of the principles of comparative anatomy with regard to disease in the human being.

It would be tedious, though perhaps not altogether uninteresting, if I was thus to continue and trace to the present day the men who have been keeping this science on the march; and otherwise, the short space of time allotted to me would not permit my giving you even a general idea of them. I will therefore briefly state to you that France and Germany have produced many more valuable works and specimens than any other country in the universe.

I have already mentioned to you one reason that caused the difficulty in former times of pursuing this study, and I have named and given you proof of its existence. For centuries, yea, even from the creation of things to the present day, there has always existed many foolish superstitious ideas with regard to the dissection of the human body. It was in consequence of this that zootomy was made a study, to throw some light, if possible, on the human

frame; nevertheless, this *even* was not practicable at a still more remote period, as there existed also nearly as much superstition with regard to the dissection of some animals. These ideas, the offspring of darkness, are received now, by a more enlightened age, with that ridicule they deserve. The human mind is in a higher state of cultivation; the stalk upon which it has been engrafted is now become saturated with sap, which, though scanty at first, nevertheless existed in the branch previous to its being placed upon the half-sapless trunk; every science is consequently striding along, and undoubtedly each will be productive of good fruit. We cannot, indeed we must not, expect that each stock is equally productive. We know that amongst so many we must find some worse than others. Some for their cultivation require a much longer time; others, in fact, manure them as you will, never arrive to any state of perfection.

It is not without astonishment that we look back, and find, the progress that each individual science has made, and not equalling in utility the science under our present consideration; a study, in fact, which, putting aside the utility of the science, is one of the most natural, the most interesting, and the most beautiful of all the general sciences. A science, unequalled, then—a science that will hereafter be one of the most useful to the preservation and health of mankind,—one which must always excite the curiosity of the philosopher,—and one which, perhaps, after it has received its proper cultivation, will be the means of our detecting some phenomena explaining the intricacy of life. Has it not been hitherto the means of detecting the different actions going on in our own frame? It is true, that the lacteals were detected in the human frame; but before their discovery by Veslingius, did not Asellius for at least twelve years detect them in quadrupeds? Again, was it not zoological knowledge that led Galvani to discover galvanic action? The thoracic duct was also discovered by Eustachius in examining the viscera of a horse; and if it was not for the dissection of animals, would the immortal Harvey ever have discovered the circulation of the blood? These facts, gentlemen, will show you why an impulse was given to the study; and, in a word, it will show that the science has relation with every other.—indeed it contemplates the principles of nature's works.

In forming our ideas of life, it is necessary that we should observe its effects in those bodies in which the effects are most simple and manifest. "By thus considering it," says Cuvier, "we shall be convinced that life consists in a faculty possessed by certain corporal combinations." "Life," he adds, "may be considered as a vortex more or less rapid, more or less complicated, the action of which is constant, and is always exerted on particles of the same description. And as all the individual component particles are thus in a state of continual mutation, constantly going and coming,

we may assume that the form of such a body is more essentially and properly its own than the substance;—the one is co-extensive with its existence, the other is gradually but incessantly changing."

As long as this motion continues, the body is called living; when it has ceased, the body dies, the component parts undergo decomposition, and the body evaporates.

One of the most striking mysteries in the animal economy is the birth of organised beings. We find them, and, in fact, observe them, developed, but cannot detect how they are formed; we trace them when attached to a body of their own kind, but which has been developed long before them; in this state we acknowledge them to be germs. The point to which the germ is attached, and even the cause which gives it an independent existence, frequently varies; but, without exception, it must always have a primary connexion. The two extreme limits, then, of existence are *birth* and *death*; and if it were not that organised beings had the power of reproduction, there would be an end of existence altogether. From these facts we cannot help allowing that certain forms have been perpetuated since the origin of things, and that every animal is capable of continuing its own race. All the individuals belonging to any one of these forms constitute what is termed a *species*. Varieties, however, are mere ramifications of the species.

All living beings are, in a certain degree, metamorphosed in the course of their advancement to maturity; certain parts are lost, and others more completely and fully formed during their advancement. We find enclosed within the skin of the caterpillar, the antennæ, the wings, and all the parts of the future butterfly. Contemporaneously with that skin disappear the jaws, the feet, and other organs which belong not to the butterfly. The feet of the frog lie concealed under the covering of the tadpole, and when the latter rises to become a frog, the tail, the mouth, and the gills are no more found. The infant at its birth loses the placenta and the foetal coverings; as it gets older it loses almost entirely the thymus gland, and gradually is furnished with hair, teeth, and at a still more advanced period with a beard; the body augments more in proportion than the head, the head more than the internal ear; while, when the frame is fully developed, we find that the liver, the largest viscus in the infant, bears a much less proportion to the other viscera than in the infantile state.

In taking a brief sketch of the active forces of the animal machine, I may observe that the muscular fibre always exists where there is need for the operation of compression. The basis of this fibre is denominated by chemists *fibrin*; and it is this substance which nature has recourse to for carrying on the changes and transmutations necessary for vegetable life. The action of these fibres is, in part, controlled by the will, and hence called *voluntary*; there are some, however, over

which the will has no power, and these are called *involuntary*. Thus the muscular fibres of the intestines carry on the peristaltic motion of the bowels, and the muscular fibres of the heart produce the incessant contractions and dilatations of that organ.

The transmutations of the alimentary canal, which are necessary to vegetative life, are carried on by means of irritation. For example, we find the food first stimulating the glands in the mouth, there causing a secretion of the saliva; it then enters the stomach moistened by the saliva, and there produces another irritation, where it causes an extra secretion of gastric juice. We now find, as it passes along into the duodenum, it becomes a still more compound body, and an additional secretion then takes place. A division now occurs; the most nutritious goes to the support of the fabric, through the medium of the lacteals, and renovates, or, as it were, re-excites both the nervous and circulating systems. The other portion, which is not proper for the support of the body, is carried along the intestines by means of the peristaltic motion of these organs, and is in fact the stimulus which causes the motion to take place. After the food has been taken into the stomach, these continual changes go on independently of the will; and if the animal is in a perfect state of health, is carried on without its being conscious of it. In some animals the excrement, instead of passing off by the lower outlet of the intestines, is again ejected by the mouth; but this takes place only in animals of the very lowest grade, and in them there is but one opening to the intestinal canal. There are some animals, however, in which we find the residue pass off solely by transpiration, and this class is much more numerous than the preceding, but in them also we have but one opening.

The circulating system, which is also intimately connected with the muscular, is carried on in some animals in a much more complex form than in others; some possess only a single or simple apparatus, others a double one; again, we find some that are furnished trebly. Some animals, however, exist without any whatever. The circulating system, though supplied through the medium of the stomach, is nevertheless, by its aid alone, incapable of continuing its action—it requires for this purpose another modification, *viz.*, respiration. It is from a free communication of the surrounding element with the circulating system that the blood undergoes various changes, and appears indeed from this source to receive its vital renewal. All animals possessing a circulating system have a portion of their vessels destined to communicate the blood with certain organs, where it becomes spread out as it were over a large surface, so as to render it more capable of a free communication with the surrounding element. We also find in all animals, whether their local habitation is land or water, a certain provision of motory organs to

attract and repel the surrounding element, whether air or water, either into or upon the respiratory organs. Those animals which possess no circulation, if they are surrounded by air it becomes diffused through every portion of the body by a kind of elastic tube, and if water, it penetrates the system by means of vessels, or is absorbed by the skin. After the blood has been thus nutrified, it appears, as it travels along, to impart its nourishment to the solids, when it returns to undergo the same modification. As the fluids are thus undergoing continual changes, so we find the solids in their turn partake of the same phenomenon, and for each supply they receive, give off that which is no longer of use to them. Thus we observe that the blood incessantly renovates the composition of various parts of the body. We have, besides, the glands, which separate from the blood those liquids necessary to the animal economy, and others which secrete such fluids destined for rejection.

The muscular system appears subservient to the nervous, and its action is regulated according to the increased proportion of excitement received by the nervous system. Thus the mainspring of life in the animal creation appears to be the mutual influence of the muscular and nervous apparatus connected with the arteries and intestines.

From practical experience we have found that irritation existing in one part may be counteracted by exciting an irritation in another. Now, as the nervous system, the cause of irritation, is intimately connected through all its parts, we need not be astonished that sensations or irritations produce debility. If the stomach is over-loaded, and an uneasy sensation or greater irritation than natural is produced, many of the other organs become enfeebled. Again, if the mind from constant meditation is over-excited, it not only loses its power of recollection, but it is also injurious to the digestive apparatus, and the whole frame in consequence becomes weakened. Accident or disease may also produce in every part of the body sensations of greater or less acuteness. Every animal possesses to a greater or less extent the sensation of feeling, but in many animals some of the other senses are deficient. We find some without ears, without eyes, or without nostrils, and some are destitute of every faculty, with the exception of sensation.

Every movement of the animal body takes place through the medium of a sensation, whether voluntary or involuntary. Every extension of parts is occasioned by muscular contractions. The direction and number of muscles in each animal are regulated according to the motion the animal may have to execute, and they vary according to the powers necessary in every species. When strength is required the muscles have a bony attachment; the bones are articulated together so as to allow the muscles to play upon the bones as so many levers. In the vertebrated animals this strength is usually required, and therefore

bones are necessary for their attachment. In the mollusca, the hardened parts are called *crusts* or *scales*, and in these not so much power is requisite. We do not find the muscles directly attached to the hardened parts, but are connected through the medium of a kind of tendon. The bones, which are connected one with the other, are so united as to restrict their motions to certain directions, and to further facilitate this we have condensed fibrous cords attached to each of them.

It is from the connexion of these various parts, as well as from the different forms resulting from them, that animals are capable of exercising the different motions we find them so naturally perform. The muscular fibres of the heart, intestines, bladder, &c., as I have before stated, are not under the influence of the will. In these parts they are either circular, radiated, or straight, but have no bony attachment; even in the vertebrated tribe, strength is not here required. Their motions are, in fact, passive, and it is only either from paroxysms of rage, or from severe mental disease, that they become at all subservient to the will; volition then, as it were, bursting through its boundaries extends its power over these forbidden regions—confusion, irritation, and disease are the consequences.

With regard to the nervous system, we find it somewhat analogous to the circulating, more or less developed in every organised being. Some animals exist without a heart, and others without a brain, and we observe some enjoying the pleasures of life, without either one or the other. All animals, I have told you, possess a degree of sensation. Man, however, who is empowered with the greatest nervous mass, is the only animal that is capable of associating his general ideas with certain images, so as to call to his mind the circumstances they are intended to represent. These images or signs that I am speaking of, constitute what is termed a language; their expression by articulation is called speech, when brought before the eye they are denominated hieroglyphics, or writing. By these signs we are enabled to collect an immense body of materials, and thus strengthen the power of our reason and imagination; they afford also a medium of communication, by which means the whole species are enabled to partake of the experience of each. Thus knowledge may be raised in the course of time to an indefinite point of elevation, and extended to an indefinite distance. Some animals, however, though infinitely below mankind in their intellectual faculties, perform many extraordinary operations; in short, we observe in the superior animals something which simulates reason. We know that by experience they gain knowledge, and this knowledge appears regulated independently of the impulses of their ordinary sensations. In their civilised state, they well know that they are under the control of man; they observe his

superiority, and are fearful of his rage. They possess also a faculty very different from human intelligence, viz. instinct, a faculty which guides them to the preservation of their own species, though this faculty apparently is altogether foreign to their own desire. The workings of this faculty can neither be considered the efforts of imitation, nor can we consider it the principle of reason; we frequently find the particular actions produced by this power so extensive, so intricate, and so complicated, and in animals, too, naturally the most stupid. Every species possesses instinct of different kinds, and each, with reference to its own species, conducts its labours precisely in the same way: for example, if we take the working bees, we find that they have, since the commencement of the world, constructed their splendid edifices in conformity with the strictest geometrical laws. The solitary bees and wasps also construct equally beautiful nests, in which they deposit their eggs; in a certain time a worm is formed, which in all probability never beholds its parent, and certainly in that state it would be impossible for it to construct a dwelling equal to that which contained it; but this worm, the moment it has become metamorphosed into a bee, will immediately construct an edifice, equally beautiful to that in which it was first deposited as a worm.

Having now taken a rapid glance at the various and necessary parts of the animal, I will next proceed and give you a brief sketch of the difference between it and the vegetable kingdom. I have said that animals are never destitute of sensation and motion, but we find that vegetables are deprived of both, and indeed reduced to the mere capacity of vegetation. Some plants, it is true, appear as if instinctively to withdraw from touch, yet this motion is too unlike that of animals to afford any proof of volition. One of the most striking characters which distinguish plants from animals is, that the roots of the former act as a digestive apparatus, while the digestive apparatus of animals act as the roots of the former. The organisation of the animal cavity must of necessity correspond with the nature of the aliment the species subsist upon; but we find that plants have always the juices prepared for absorption, and supplied from the soil and the surrounding element. The functions of the animal must therefore be of necessity much more complicated than those of plants. Another leading distinction between the animal and vegetable kingdom is the circulation; but I have already told you, that some of the more simple animals are also deficient in this respect. The muscular and nervous systems are also a third distinction. The chemical composition of the animal body also differs from the vegetable. The elements belonging to the vegetable kingdom, are oxygen, hydrogen, and carbon, while in the animal we have a fourth, viz. azote. The peculiar composition of plants requires that

the hydrogen and carbon should be retained, and the superfluous oxygen exhaled: there is also in general a very small portion of azote absorbed, but for the support of animal life the inverse ratio takes place. The function of respiration is also another very distinctive difference between animal and vegetable life. It would almost appear that these kingdoms live one upon the other, for we find the vegetable composition, of which hydrogen and carbon form the principal parts, one of the principal sources of nutrition for the animal; and again, we find the decomposition of the animal, one of the principal supporters of vegetable life. There are many interesting and striking facts that we may trace, when we come to consider the difference between herbivorous and carnivorous animals, connected with the vegetable kingdom. These, however, I will endeavour to point out to you, when we come to the consideration of this class of animals.

Having now, gentlemen, laid before you a portion of that general outline which I propose to finish in the course of this season, I must beg your further attention while I make a few observations on the great importance which ought to be attached to the study of comparative anatomy; for, by its agency, what is often obscure and too faintly developed in man is rendered plain and conspicuous. By its light, as through a powerful optical machine, we are enabled to view what is microscopic in the human frame on enlarged and more obvious dimensions. To describe the amount of pleasure and delight arising in a well constituted mind from the pursuit of a knowledge so extended, diversified, and magnificent, so blended with the mighty operations and economy of nature, so beneficial in its results to mankind, would call for a force of language and splendour of diction, which requires an advocate, gifted with more power of eloquence than the humble individual before you can lay claim to; but to the lover of scientific research, and the admirer of those harmonious laws, which, extending their sway alike over the meanest and the mightiest, point to an omnipotent and benevolent Creator, I would say,—here is a field where all you love and admire may be seen and enjoyed, and which is boundless as the gratification experienced in surveying it. In whatever light we examine this science, it still presents a most interesting aspect to the observer. To the mathematician, the symmetry and exact co-adaptation of the different parts of widely distinct races, the direction and dimension of the muscles, the moving powers acting upon solid bony levers, furnish ample matter for his speculation; he finds the best principle for constructing that triumph of architectural art, the dome, in the sublime model furnished by the human skull. He submits to admeasurement and calculation the cylindrical bones of various animal bodies, and finds in all a wonderful economy of substance and adaptation to their offices; nothing superfluous has

been admitted, nor anything wasted. Durability, usefulness, and a saving of the plastic material distinguish the works of our Almighty and benevolent mother, Nature; and it is not declaring too much, if we aver that, whatever mechanical contrivances the wit of man by painful research during the long lapse of ages may have invented, their prototype is to be found in one or other of living animated bodies, and requires but the eye of active investigation into her plans and operations to become manifest.

To the geologist, anatomising as it were the depths of the earth, and meeting in his inquiry the relics of long extinct creations buried within her capacious bosom, our science affords a light by which he may read their probable dates of actual existence, their forms while living, and the race to which they belonged; for, although but a few isolated remains of the perished being are submitted to the inspection of the comparative anatomist, its whole fabric may be delineated by him from these scanty materials as accurately as the flow of a curve can be described from its equation at any given point. The chemist and natural philosopher will also find in this science scope of indefinite extent for the prosecution of their peculiar inquiries, tending at the same time to their gratification, and the triumph arising from fresh discoveries, and to the lasting information and benefit of mankind. No niggard hand has spread the table at which they may feast; their onward course may be prosecuted without fear of being satiated, they will find new delights present themselves at every step, and new excitement arising to stimulate the appetite to farther exertion as fast as the old ones fade; in a word, comparative anatomy is the consideration and analogy of forms simple in themselves, but so infinitely varied and combined that their range appears to be inexhaustible.

Lastly, gentlemen, after having briefly examined the different component parts of so extensive a subject, I must take leave to add a few words on its vastness and exceeding importance to the general interests of scientific knowledge, and the benefit of the social community. In its pursuit, whichever way our steps are directed, new objects are sure to present themselves, and furnish food for man's noblest faculty—*reason*; from its sources, boundless as the confines of our earth, the poet may gather images to enrich his song, and the philosopher deduce laws and inferences which, when afterwards carried into effect, may produce consequences as surprising as they are beneficial. There is scarcely any other science to which the one under consideration may not afford some degree of light. In the study of human anatomy and physiology, the illustrations it extends to the searcher after truth are indispensable; they stamp *certainty* on points which, without *such aid*, must have remained *conjectural*. To the transformations, also, which have from

time to time taken place in our ever-changing globe, comparative anatomy is a faithful guide; for the geologist without the illumination it throws on his abstruse subject, would be a wanderer in darkness, or a pursuer of shadows whose true forms could not be scanned by any operation of his intellectual powers. The fossil remains of animals whose races have been long since extinct and buried in the strata on which they in ages gone strode in a degree of might and stupendous magnitude, of which their skeletons alone can now tell, are exhumed by the geologist to throw light upon his art, but in this he requires the assistance of the comparative anatomist. It is the latter alone can put together the disjecta membra of the broken-up frame-work; it is he alone can restore the *lucidus ordo* to the scattered fabric. But his art is not confined solely to the contemplation of the bony structure of animals; he divests this rigid scaffolding of its soft envelope, and inquires into its form, relations, and offices; the connecting links, the ligaments, are scrutinised, and the various powers and functions of the muscles, the moving apparatus, estimated. Nothing in the animal economy escapes his observation, and, finally, he *compares*, and by the lamp of analogy arrives at certainty, where before were doubt and imperfect speculation.

The fund of information, both instructive and agreeable, elicited by these labours of the zootomist, is extensive and highly encouraging to the student in his pursuit after similar knowledge. *Nor is there one of you* here present, and *resolved to persevere* in a science so rich in materials for pleasure and profitable attainments, who may not, by his individual exertions, furnish additional facts and discoveries to those already known. I may here observe, that one of the most surprising and pleasing departments of our science is that which considers the changes which, during the lapse of ages, life has undergone on the surface of the globe. The fossil remains of animals which existed antecedent to man upon the earth, are being continually discovered, both in the old and new worlds, and furnish proofs, strong as any documentary evidence, concerning the changes which have through successive centuries taken place in the numerous races inhabiting our globe; and facts of the same kind are continually increasing; and this also is equally true of the vegetation which embellished the earth at that time, with which of course the animals were in close connexion. Now, new races of animals and vegetables have made their appearance, and superseded those whose ancient existence is only revealed to us by means of their fossil remains. Thus in the course of the ages which preceded the appearance of man upon earth, its surface has successively changed its aspect, its verdure, and its inhabitants; the seas have nourished other beings, and the air has been peopled with other birds. I trust that although the field of comparative anatomy has of late been

trodden with much energy and perseverance by some of our continental neighbours, of whose names I shall have frequent occasion to make honourable mention in the course of these lectures, that there are yet innumerable paths leading to useful discovery, in reservation for the exercise of our national talent, and that although our countrymen have come late to the arena of emulative competition in this science, their onward course in its cultivation will, at no distant period, not only equal, but eclipse the fame of those who have gone before them. Gentlemen, the pursuit of this science is, perhaps, more captivating, after the first difficulties in its study are surmounted, than that of any other. Many of its subjects are easily obtained, and at an inconsiderable expense, others may be observed in the different collections and museums now fast increasing in this metropolis. Of course the possession of the more rare specimens must, as in every other case, be the result of individual enterprise. But the magnitude and extent of this arena of scientific exploration, ought not to terrify or deter the young and aspiring traveller, who would venture within its bounds. It is true that even if gifted with the highest talent, he may never reach its utmost limits, for, as I have already said, they appear to be infinitely distant; yet enough may be learnt by moderate exertion and assiduity, by the exertion of that powerful instrument in smoothing all difficulties—perseverance—to pave the way to a desirable and masterly knowledge of its secrets. Let no one, therefore, be disheartened at surveying the extent of this science and its collateral relations, for assuredly a desire to attain it, aided by application not closer than is usually bestowed upon the study of inferior arts, will accomplish the end in view. I say with perseverance, for the mental power, and that readiness of conception which, as it were, at once grasps, and intuitively, and rapidly reasons upon whatever subject is laid before it, appropriating it without almost an effort, is not alike vouchsafed to all; and where it is wanting it is consolatory and encouraging to know that there exists another impulse in the human mind, capable of producing results as great as ever the most splendid natural abilities gave birth to—that property, gentlemen, is perseverance.

By *it* the most stupendous results have been effected—by *it* the slow in apprehension, but laborious in investigation, may, as with a master-key, open the door to every science. But while impressing on your minds the beauties of the science which now engages our attention, and inculcating the advantages which its pursuit will confer, I must not forget that it is my province to do so with the modesty and humility which becomes a teacher commencing his arduous career. That such feelings are mine, I beg to assure all now before me, and, further, to add, that it is my fervent desire, in the execution of the task I

have undertaken, to prove myself worthy of your confidence, and to discharge my duties conscientiously yet zealously. In doing so I feel convinced that both my own and the interests of such as may be pleased to rely on me and become my pupils, will be best consulted and secured.

It remains now for me, gentlemen, to state briefly the plan which I propose to follow in the fifteen succeeding lectures I shall have the honour to deliver during the season, in this theatre. It is my intention, then, to invert, in my general outlines, the routine ordinarily adopted in teaching the minutiae of the science; that is, instead of beginning with the lowest order of animal life, and ending with the highest and most complex, to describe the latter first, and so proceed downwards, until we reach that dimly defined and almost imperceptible boundary which separates animal from vegetable life. In pursuing this course, I venture to assert that its parallel may be found in another science as widely useful and extensive as our own—I allude to the calculation of numbers. In these operations, in the one instance, we begin from the unit, and descend in the scale to the smallest infinitesimal, as in decimals; while in the other, as in whole numbers, we commence at the bottom of the standard, and rising, proceed to its utmost limits. Whichever scale we follow it may be effective in itself, and by reversing their relative positions, *perhaps* a better understanding of both may be attained. Thus far, then, I mean to innovate on the usual routine of teaching our science. In my succeeding introductory lectures, I shall proceed from man, the head of the visible creation, downwards to the verge of mere organic life; but in the more difficult effort of portraying the minute parts of this science, which shall be the business of the next session, an opposite line will be drawn, and commencing with the inferior forms of creation, your attention shall be gradually directed to its supreme limit. Finally, gentlemen, I have to thank you for your attention this evening, and to entreat, if any thing has been neglected or omitted in this my opening lecture, the omission may meet with that indulgence and favour which erring human nature is too often in need of, and which I am willing to believe you will kindly concede.

Reviews.

Lectures on the Diseases of the Lungs and Heart. By THOMAS DAVIES, M.D., Member of the Royal College of Physicians, &c. &c. London: Longman and Co.

A Treatise on Pulmonary Consumption, comprehending an Inquiry into the Causes, Nature, Prevention, and Treatment of Tuberculous and Scrofulous Diseases in General. By JAMES CLARK, M.D., F.R.S., Consulting Physician to the King and Queen

of the Belgians, and Physician in Ordinary to the Duchess of Kent and the Princess Victoria. London: Sherwood and Co.

THE immortal discovery of Laennec has conferred perhaps as great a boon upon mankind as the invention of the compass or the steam-engine, and, in the language of Dr. Davies, "has conferred upon him a crown of intellectual immortality." Though the stethoscope may not have enabled us to cure consumption, or to alleviate its symptoms with more facility, it has enabled the physician to predict with almost unerring certainty the situation and the character of pulmonic disease. He is thence capable of forming, generally, an accurate prognosis; he can say whether it must necessarily be mortal, or may be relieved and cured by judicious remedial measures—two important achievements all will admit. Before the invention of the stethoscope we revelled almost totally in conjecture—our practice was in a great measure empirical; certain external signs seemed to indicate certain internal changes; and it was only by the closest attention and by long experience in medicine that an accurate diagnosis could even occasionally be arrived at. Chronic bronchitis and phthisis pulmonalis were very generally confounded until the one was removed or the other unmasked its talons in the third and last stage. Oedema pulmonum and emphysema pulmonum remained undiscovered, unknown, and were only revealed by death. But it is not in the diseases of the lungs and the air passages only where the stethoscope has displayed its utility—almost every form of disease of the heart and of its large vessels was beyond the reach of human investigation prior to the discovery of this instrument. By its aid numerous morbid changes of the heart have been detected during life, and post-mortem phenomena have, thousands of times, verified the accuracy of the diagnosis. "Really," exclaims the old practitioner, "what a number of diseases of the heart exist now which did not formerly!" The position is probably incorrect. That civilisation, climate, habits and manners of European nations have effected this apparent disparity in the number of those diseases, is perhaps equally untenable. By the telescope new worlds have been discovered—worlds which existed from the beginning of time, but had eluded the perception of man; they were not produced by the revolution of empires nor the collision of worlds,—they became visible through the telescope; in such a manner were cordal diseases multiplied in number by the stethoscope.

The two works before us each possess their respective merits; they are the productions of men eminent and learned in their profession, of long experience, and who have enjoyed a wide field of observation. They are not the ephemeral effusions of a day, which are born but to die ere a single sun hath accomplished its revolution.

But to leave the field of imagination and come down to human actions, let us see what the books contain. Dr. Davies' work, as its name implies, treats upon the various diseases of the lungs and heart. It differs little from the admirable works of Laennec, Williams, Hope, &c., except in one respect—that it is published in the form of lectures, as they appeared in a contemporary. They were delivered, the author tells us in his Preface, to a few medical practitioners, and since to the Medical Class of the London Hospital, during which period they have been matured by observation and research. The order pursued in treating the subject scarcely differs from that usually adopted. The first lecture is devoted to the importance of a knowledge of this subject, to the frequency and the causes of thoracic disease, to the means by which they can be best studied, viz., by auscultation and percussion, aided by collateral signs; to the theory of respiration and of the circulation, where are embodied many judicious and acute observations on the connexion between these two great functions in health and disease.

In the subsequent lectures the individual diseases of the lungs, heart, &c., are described in the usual manner. On some points he differs from his contemporaries. We have not space to analyse fully this interesting work; its merits, however, are already appreciated by the profession; we need not do more than state that it is a valuable production. In conclusion, we have much pleasure in quoting the mode of treatment Dr. Davies adopts in phthisis, in which will be observed a fairness and a candour presenting a pleasing contrast to the effrontery, arrogance, and wilful misrepresentations of some of his contemporaries.

"My plan of treating phthisis is generally as follows:—

"If I meet with an individual in the earliest stage of the disease, or in whom only a predisposition to it exists, I place him upon a very moderate animal diet, allowing him no wine or stimulants in any form; I permit moderate exercise, as walking, riding on horseback, or sailing. As the month of September advances, I advise him to change his position entirely, and to winter in a warm climate; if in England, at Undercliff, Torquay, or in some sheltered valley in the south. If his circumstances permit, let the change be still more complete, by sending him to Madeira, Lisbon, Hyères, or Nice. If the means of the patient do not allow him to effect this, I then recommend him to be confined during the winter months in chambers in which the temperature should be regulated according to his feelings.

"At this early period of the disease, if the dyspnoea and cough be troublesome, and the pulse somewhat full and hard, I abstract a few ounces of blood occasionally; but this, gentlemen, should not be too often repeated, as you should preserve the strength of your patient as much as possible. The digitalis, under

such circumstances, is of use; blisters, or the tartar emetic ointment, may now be employed. I commonly administer a combination of ipecacuanha, squills, and hyoscyamus, as an expectorant, and endeavour to alleviate the cough by emulsions and other demulcents.

"You will often, very often, find that such is the weak state of the patient, even from the beginning, that he will bear no depletion. In those cases, support him with a bland and non-stimulant diet,—as milk, the white meats, jellies, &c.; and you may administer the ordinary tonics, combining them with the acids, if there be night sweats and no diarrhoea.

"When the tubercles soften, and the excavations commence forming, I should recommend you, gentlemen, not to send your patients abroad: it rarely, if ever, is of any service, but is often highly disadvantageous; for they are removed from the comforts and attentions of home at the moment they are most required, and they too often, unfortunately, expire in a foreign land, without a friend to afford the last consolations.

"As the disease advances, the remedial means diminish daily in their effects: the distressing symptoms alone can be attended to. Thus the cough may be somewhat allayed by demulcents,—as emulsions, the lichen islandicus, the Irish moss, &c.: the two latter also serve as articles of diet. Opium produces often the greatest relief in procuring sleep and abating the cough. The hyoscyamus and belladonna have been used with the same intentions, but rarely with such good effects.

"I am satisfied that it is injudicious to permit the diarrhoea to continue at any period of the disease, since it produces great exhaustion. It often yields to the ordinary chalk mixture. I sometimes use small doses of the sulphate of copper, combined with opium, if the relaxation of the bowels be very obstinate.

"A gargle, composed of borax, honey, tincture of myrrh, and infusion of roses, often relieves the aphthous state of the mouth, tongue, and fauces.

"I recommend the inhalation of chlorine gas, if the concomitant catarrh be extensive and considerable; and, I think, with occasional advantage.

"Such is the general plan by which phthisis may be *palliated*; but I repeat again, that I believe the disease not to be *curable* by any means proposed up to the present time."

Dr. Clarke's work is, in some respects, a different production to that of Dr. Davies, inasmuch as the latter treats upon all the thoracic diseases, whilst the former discusses in detail the nature of consumption and scrofulous diseases only.

The great object of Dr. Clarke's work is to direct the special attention of medical men to the *origin*, the *causes*, and the *prevention* of consumption, and of some of those affections denominated scrofulous. The undertaking is one which requires a most comprehensive

mind—a masterly mind; a mind replete with information upon almost every known object in physics and philosophy. The causes of disease alone are among the most obscure parts of philosophy. We see a certain effect, and we search for a cause; but in medicine the mind is so warped by theory, so clogged by dogmas, that to attribute an effect to a new cause—an unrecognised cause, amounts, in the estimation of some individuals, to heresy? But what do we know of the causes of disease? Cholera appears at a certain period of the year in a certain situation, and one physician traces it to an unquestionable malaria; another physician affirms it to be contagious, and traces it geographically to the East, and proves it to have been conveyed in “a bale of goods.” The glorious uncertainty of physic! Dr. Clark deserves the commendation of the public in introducing to the profession a comprehensive review of the knowledge afloat on this subject, and of bringing it into a compass attainable by all. His preface is a model of chaste and classical composition, and the modesty of the author might be usefully studied by the puffing authors of the present day.

“One of the principal objects of the present work,” says the author, at page 5, “is to show that tuberculous disease, whether in the lungs or elsewhere, has its origin in a morbid state of the constitution, in some cases hereditary, in others induced from various causes, independent of any hereditary predisposition; and to attach the proper value to those pulmonary diseases which are considered by some as the real causes of consumption, but by others, more correctly, as determining causes merely, and often only complications.

“If I succeed in giving a satisfactory exposition of this, the most important, but hitherto the most neglected part of the subject, I may hope to lay the foundation of a sounder pathology of tuberculous diseases, and to establish a more rational and more effectual mode of prevention, and a more successful method of treatment than has hitherto prevailed. No physician, acquainted with the morbid anatomy of tuberculous consumption, can for a moment indulge the hope that we shall ever be able to cure what is usually termed ‘confirmed consumption,’ if we except the small proportion of cases in which the tuberculous deposit is confined to a very limited portion of the lung. We might as reasonably expect to restore vision when the organisation of the eye is destroyed, or the functions of the brain when the substance of that organ is reduced by disease to a pulaceous mass, as to cure a patient whose lungs are extensively disorganised by tuberculous disease. The records of medicine afford too strong proofs of the truth of this statement; for it may be fairly questioned whether the proportion of cures of confirmed consumption is greater at the present day than in the time of Hippocrates; and, although the public may continue to be

the dupes of boasting charlatans, I am persuaded that no essential progress has been made, or can be made in the cure of consumption, until the disease is treated upon different principles from what it hitherto has been. If the labour and ingenuity which have been misapplied in fruitless attempts to cure an irremediable condition of the lungs, had been rightly directed to the investigation of the causes and nature of tuberculous disease, the subject of our inquiry would have been regarded in a very different light from that in which it is at the present period.”

It would be impossible for us to present even a tittle of the leading contents of this work, without encroaching on the space ordinarily allotted to other matter. Perhaps it will suffice if we would but give a few extracts, as examples of the style in which the subject is treated; yet no extract can display the powers and intelligence of the author, they are distributed throughout the book.

“The views of Dr. Carswell, regarding the seat of tubercle, enable us to explain, in a very satisfactory manner, the mode in which the different tissues are successively affected. The tuberculous matter being, as he describes, deposited in the air-vesicles and minute bronchial tubes, these parts are necessarily first irritated by it; and being constantly distended by the matter accumulating within them, they are gradually enlarged in size, and sooner or later are destroyed by ulcerative absorption. Hence it is that the bronchi are always found enlarged, stopping abruptly, and appearing as it were cut across, at their entrance into a cavern. Unlike the other parts of the lungs, they are never found enveloped and compressed by tubercles, except in those instances of rapid infiltration in which the whole substance of the lung appears to be simultaneously injected.

“The cellular tissue, healthy air-vesicles, and blood-vessels are at first only pushed aside, and compressed by the tuberculous deposits, but they are ultimately condensed and rendered impervious to air by the infiltration of tuberculous matter and the common products of inflammation.

“The mode in which the blood-vessels are affected by the development of tubercles and the formation of caverns in the lungs, has been so well described by Stark, that we cannot refrain from introducing the whole of his remarks upon it. ‘The pulmonary arteries and veins,’ he says, ‘as they approach the larger vomicæ, are suddenly contracted; a blood-vessel which, at its beginning, measured half an inch in circumference, sometimes (although it had sent off no considerable branch) could not be cut up further than half an inch. And when outwardly they are of a large size, yet internally they have a very small canal, being almost filled up by a fibrous substance; and frequently, as they pass along the sides of vomicæ, they are found quite detached, for about an inch of their course, from the neighbouring parts. That the blood-vessels are

thus obstructed, and that they have little or no communication with the vomicæ, is rendered still more evident by blowing into them; by blowing they are not sensibly distended, nor does the air pass into the vomicæ, excepting very rarely, and then only by some imperceptible holes; and after injecting the lungs by the pulmonary artery and vein, the parts less affected by disease, which before injection were the softest, become the hardest, and, *vice versâ*, the most diseased parts, before injection the hardest, are now the softest."

After adverting to the various opinions regarding the cure of consumption, Dr. Clarke concludes:—

"In recording these proofs of the curability of pulmonary tubercles, I think it right to remark that I do not attach much importance to them, further than that they afford encouragement to persevere in our endeavours to correct the tuberculous diathesis; seeing that nature can remedy the local disease when it is not very extensive. We must never allow our hopes of such a termination of the disease, nor our endeavours to promote it by local remedies, to divert our attention from the constitutional treatment. Unless we can correct the constitutional disorder in which local tuberculous disease has its origin, such cure is of little avail, as it is usually succeeded by fresh deposits of tubercles to an extent which renders recovery hopeless. It not unfrequently happens that young persons are attacked with symptoms of phthisis, which under proper treatment cease, and years elapse before there is any renewal of the disease. Were advantage taken of the intervening period to correct the tuberculous diathesis, the cure might prove perfect. I have known recoveries from two such attacks, the third proving fatal; the interval between the first and last attack was twelve years. The opinion of Laennec on this subject is so important, that I shall cite his words: 'We may indeed say, that the greater number of cases of phthisis are latent at the beginning, since we have seen that nothing is more common than to find numerous miliary tubercles in lungs otherwise quite healthy, and in subjects who had never shown any symptoms of consumption. On the other hand, from considering the great number of phthisical and other subjects in whom cicatrices are found in the summit of the lungs, I think it is more than probable that hardly any person is carried off by a first attack of phthisis. Since I was first led to adopt this opinion on anatomical grounds, it has frequently appeared quite clear to me, from carefully comparing the history of my patients with the appearances on dissection, that the greater number of those first attacks are mistaken for slight colds, and that others are quite latent, being unaccompanied with either cough or expectoration, or indeed with any symptoms sufficient to impress the memory of the patients themselves.' I am satisfied, from my own observation, that Laennec's opinion

is correct. Tuberculous disease of the lungs in early life is, I believe, frequently cured; but it very generally recurs, often at an advanced age, and ultimately proves fatal. The cases of this kind which I have observed have been most frequently in females. While proper measures, therefore, are adopted to abate pulmonary irritation and congestion, our utmost endeavours should be directed to correct the constitutional disorder, as the only sure means of obviating a renewal of tuberculous disease."

In the latter part of the book, the origin, causes, and prevention of consumption, are entered into, and the usual remedial methods adopted are fairly and judiciously canvassed.

THE MASK OF NAPOLEON NOT MADE BY AN TOMMARCHI.

(Extract from a Lecture by Dr. Graves.)

In my last lecture I communicated the description of the morbid appearances observed in Napoleon Buonaparte's stomach; these particulars, long ago published, I read from the original manuscript account of the autopsy of Buonaparte, written during the examination of the body, and in the room where the autopsy was made. This curious and valuable document is signed by all the English medical officers present, and, among the rest, by my cousin, Dr. Burton, whose family has most obligingly communicated to me this and various other interesting papers relating to circumstances connected with the bust of Napoleon, which ought to be made more generally known.

Before I enter on the detail of these circumstances, it is right to mention, that Dr. Burton was a man, not only of great ability, but of the highest character for honour, gentleman-like conduct, and strict unbending principles. If ever there existed an officer in the British service whose word could be implicitly relied on, it was Dr. Burton. He was held in the greatest estimation by the professors in Dublin, under whose auspices he commenced his surgical studies; and there was not a medical officer in the army, whose skill, diligence, and trustworthiness were more highly thought of by Sir James M'Gregor, the head of the department. I am thus particular in fixing the standard of Dr. Burton's moral qualities, because, as the sequel proves, they form part of the internal evidence of the truth of the following narrative. I may farther observe, that Dr. Burton was for many years surgeon to the fourth regiment of Foot during the war, and, by means of his skill and active humanity, he became such a favourite with his brother officers, that, on his leaving the regiment, they presented him with an address and a piece of plate. Those who know the service will be best able to appreciate the value of such a testimony. After the termi-

nation of the war he resided in Edinburgh for some time, where he graduated, and then, at the special request of Sir James McGregor, he again went on active service, took charge of the sixty-sixth regiment, and proceeded to St. Helena.

It is here our narrative commences, and certainly, if those who surrounded Napoleon during the latter period of his life, and have so profitably published him after his death,—if the authors of those volumes of private anecdotes, mingled with a relation of facts of historical importance, have been as regardless of truth in working out their details, as were some of the members of Napoleon's suite in the transactions I am about to relate, the world runs no inconsiderable risk of being deceived with regard to all matters connected with the court of Buonaparte. It is singular enough that, though often solicited, this great man never submitted to the operation of having a mould taken from his head, and, consequently, when he died, it became an object of the greatest importance to supply this deficiency. It is to Dr. Burton, and to him alone, that posterity are indebted for the mask now mendaciously claimed by another, for I have before me a "Prospectus for publishing by Subscription the Mask of Napoleon, cast in the Original Mould, taken from the Face of the Emperor immediately after his Death, by Dr. Antommarchi." Never was a more daring or a grosser imposition palmed upon the world. Let us hear Dr. Burton's account of the transaction.

"I arrived here from the Cape on the 31st of March, at which period it was known that Buonaparte was in bad health; the nature and extent of his disease, however, were only known to those immediately concerned. He gradually became worse, and about the latter end of April the symptoms became very alarming. On May 5th, about half-past six in the evening, he expired. At six the next morning I saw him, in presence of his own staff, the governor, and his staff. Buonaparte's countenance was then certainly the most striking I had ever beheld; the sensation I experienced I can never forget, viewing him thus laid low who had once ruled the greater part of the civilised world with an iron hand, his countenance still expressive of that commanding tone which he assumed even to his last moments, and his capacious forehead indicating, according to the doctrines of phrenology, that his mental faculties were fully developed. This last circumstance struck me so forcibly, that I immediately proposed to the governor to take a bust of him in plaster of Paris. Marshal and Madame Bertrand were equally anxious that it should be done. I therefore set to work, but the shops in this island not being supplied with that article, I was obliged to have it picked up in a crude state at the other extremity of the island, for which purpose the admiral sent his boats. This, however, occupied so much time, that forty hours

elapsed after his death before the plaster was ready. The French people wished Dr. Antommarchi, Buonaparte's physician, to execute it, but seeing the plaster, which was of a bad description, he declined attempting it, as he said it could not possibly succeed. As, however, I have always made it a point not to give up anything as impracticable until I have made a trial, I set to work, and fortunately succeeded, to my great gratification and that of all present. The likeness is admirable for the time it was taken. The badness of the plaster prevented me from taking more than one bust from the model, and this bust Madame Bertrand seized upon and would not give it up, although I promised her the best that could be executed in England, where plaster of Paris can be had of the best description. Marshal Bertrand and she have, however, promised me a bust from it as soon as they arrive where it can be executed. It will then be in my power to multiply them as much as I wish. I regret the more not being able to procure good plaster here, as I intended to have sent a bust to you as a matter of curiosity."

In this account, Dr. Burton does not mention some particulars which I have often heard himself relate, and which were known at the time to every British officer then in St. Helena. Dr. Burton had undergone great fatigue in collecting the crude gypsum, which was only to be found in small quantities, and in remote places difficult of access. In so hot a climate time was precious, as every hour threatened to destroy for ever the likeness the dead bore to the living; consequently, Dr. Burton was obliged to search for the gypsum by torch-light. But for the assistance of the admiral, who kindly sent several boats on this service, his efforts would have been unavailing.

When he had satisfied himself as to the perfect success of his undertaking, he went back to his quarters to enjoy some refreshment. Here he informed the authorities and his brother officers, that the result had exceeded his most sanguine expectations. They wished to see the bust, and upon being told that it was at Longwood, one high in rank, and who well knew the value of a courtier's solemn promise, immediately exclaimed, "You have been deceived, you will never see the mould again." Dr. Burton said that it was impossible that an attempt should be made to violate an agreement entered into before so many witnesses, for besides himself and Madame Bertrand, there were present Count Montholon, Dr. Rutledge, and Mr. Payne, who could all testify as to the terms made by him before he commenced the execution of the mould. He immediately returned to Longwood, and found that the suspicions of his brother officers were justified by the event, for the mould was removed during his absence, and it never again came into his possession. It appeared, however, that the theft was committed by persons rather unskilled in their

vocation, for the only part which was taken away was the mask, or that part of the mould corresponding to the mere face, and not including the ears or the upper part of the forehead, and not extending downwards beyond the turn of the chin. The rest of the mould was left behind, obviously because its import and value were not understood by those who removed the mask; in fact, they did not comprehend the meaning of the remaining portions of the mould. These Dr. Burton immediately removed, and this explains the reason why Antommarchi, the pretended maker of the mould, did not and could not publish more than the stolen mask.

Was not the head of Napoleon worthy of a cast? Were the scientific men of Europe indifferent as to the form, shape, or size, as to the phrenological development of such a man?—Certainly not.

When, to use his own phrase, Antommarchi conceived the happy idea of taking a cast, in plaster, of that illustrious face, why did he not also conceive the happy idea of taking a cast, in plaster, of that illustrious head? The reason is simple,—his was not the conception, his was not the execution of this happy idea! Nay, when the plaster had been collected and prepared by Dr. Burton, Antommarchi actually refused to undertake making the mould.

This appears from the following letter addressed by Dr. Burton to Madame Bertrand.

Copy of a letter from Dr. Burton to the Countess Bertrand.

*James Town, St. Helena,
May 22nd, 1821.*

MADAME,—As I find that the final arrangement for the embarkation of the 66th regt., has been made, and that it prevents my having the honour of accompanying you in the same ship to Europe, I am extremely anxious respecting the bust of Napoleon, which with such infinite pains I succeeded in forming. You will, madame, I trust, excuse the liberty I take in addressing a letter to you on the subject, arising, as it does, from a desire of intruding as little as possible, at a period when you are so much occupied; at the same time, anxious to lay before you a statement of facts in a more clear manner than I believe has yet been done. My original intention was to have taken from this bust another model, so as to have enabled me to have left one with you; but owing to the badness of the plaster of Paris, Dr. Antommarchi and I agreed that it would be running a great risk to attempt it until we arrived in England. As, however, you have yourself, and others have also, informed me that your landing in England is not by any means certain, my wish naturally is to have the bust in my own possession, at the same time, I most solemnly promise, upon my honour, that you shall have one of the best that can be executed on my arrival in London, and left

for you there, or sent to any part of the world you may point out. This, madame, every one agrees with me is as much as can be expected, seeing that the bust could not have been taken, had it not been for my exertions.

It is rumoured here that Dr. Antommarchi intends taking it to Italy. Respecting any claim he can have to it, you, madame, Count Montholon, Dr. Rutledge, and Mr. Payne, the portrait painter, and some others who were in the room at the time, are aware that he refused even to attempt it, as he said it could not possibly succeed, but finding that I was succeeding, he then lent his assistance. I shall, notwithstanding, with the greatest pleasure let him have a bust, but I positively protest against his having the original. The world will certainly agree with me, that it would be a great injustice were I not to get both the credit and possession of my own work. As well, indeed, madame, might the portrait be taken from the artist who executed it a little before I succeeded in the cast. I beg also to mention to you, that I am in possession of the back part of the head, without which the bust will be imperfect in those parts which mark so strongly the character of a great man. On considering this statement of facts, I trust you, madame, will not refuse to send me the bust, and I beg leave to repeat, in an equally solemn manner, the promise I have given above, that you and Dr. Antommarchi shall each have the best that can be executed in London.

I have the honour to be, Madame,

With profound respect,

Your most obedient humble servant,

FRANCIS BURTON, M.D.,

Surg. 66th Regt.

It need scarcely be remarked that Dr. Burton's letter was answered in a most unsatisfactory way, and that he had not the most remote chance of again getting possession of the mould while the late emperor's suite remained in St. Helena. When they arrived in London he immediately applied to the Revenue Office and to the lord mayor, and deposed to the fact that Madame Bertrand was in possession of what belonged to him; he sought and demanded inquiry, but it was declared by the magistrates that they could not, on Dr. Burton's deposition concerning a fraud, said to have been committed at St. Helena, lay a detainer on the property of the accused in England; and so the matter ended. Dr. Burton kept the mould of the head, while the mask was brought to France.

It is particularly to be observed that the mask of Napoleon was never publicly claimed by Antommarchi as having been conceived or made by him, as long as Dr. Burton was alive. So bold a step Antommarchi was not prepared to take; but when Dr. Burton, who died suddenly of pulmonary apoplexy, had been some years in his grave, and when it was believed

by Antommarchi and his accomplices that all means of exposing their fraud had been lost or forgotten, then, indeed, he comes forth and proclaims to the world the well-kept secret of his own merits! It is disgusting to hear such a man speak of his disinterestedness, as he does in the following terms in his Prospectus, published in Paris in 1833, and republished in London in 1835:—"Dr. Antommarchi brought it with him to Europe, and placed it in the hands of a friend in a foreign land. Most advantageous offers were made to him for the purchase of this precious relic, presenting as it did a field for a vast speculation. The Doctor, however, did not believe himself at liberty to dispose of a property which he considered ought to become that of the French nation whenever it ceased to be his."

To conclude, it is to Dr. Burton, and not to Antommarchi, that France and Europe owe this inestimable mask*.

SPEAKING MACHINES, NO. III.

(Continued from page 726.)

The Consonants—Nature of—Kempelen's Researches on—New Classification of the Sounds of the English Language—Remarks on the Mechanical Imitation of Speech.

ALL the letters not included in the order of vowels have hitherto been described under one general name and definition—the name, *consonant*—the definition, incapable of being uttered alone. That the term and the definition are both misapplied, any person who will pronounce the sounds represented by S, F, M, SH, &c., will at once perceive; for he will find that those sounds may be obtained without the conjunction of any vowel or other letter, and that they may be prolonged, alone, till the breath is exhausted.

The supposition that all the sounds that are not vowels are, therefore, of necessity, consonants;—the idea that the alphabet contains only two primary groups, and that all others are mere subdivisions of these, have led grammarians to form mistaken notions on the nature of the articulations, and to distinguish only a difference in *degree*, where there exists in reality a difference in *kind*.

De Kempelen himself, the latest, the most accurate, and the most original of the writers upon speech,—who has detected and shunned many of the errors of his predecessors,—who has gone through the simple sounds of the principal European languages, explaining their

nature and mode of utterance, the defects most common in their articulation, with the causes and means of removing such faults,—and who supports his assertions by experimental evidence derived partly from observation of the natural organs and partly from his mechanical imitations of speech,—De Kempelen himself has fallen into inconsistency by following the old divisions of vowel and consonant, and the popular definitions attached to those terms.

Thus at page 227 he defines a consonant to be "a sound or letter which cannot be expressed alone, or at least not clearly; so that to render its pronunciation distinct it must be combined with some other letter, either vowel or consonant, preceding or following it;" while his description of one class of these very sounds is the following:—"The *breathed* consonants (*windmillauter* German, *soufflées* French), are those which are formed by an aspiration, or by the breath expelled in different ways from the mouth without the aid of the voice. They may be heard without the assistance of another consonant or vowel, feebly it is true, but with sufficient distinctness to mark the difference between one letter and another. These letters are F, H, S, and SH."

Where the inconsistency between these two passages lies it would be superfluous to point out; we need only observe, that in the last the word "feebly" is misapplied. The additional clearness which those sounds attain when combined with a vowel depends merely upon the force of contrast, before explained; for if they are uttered in quick succession, so as to be contrasted among each other, they will become as plain as when pronounced in union with vowels. With regard indeed to H, it can hardly be reckoned a separate articulate sound. Articulate sounds are the breath modified,—H is the breath unmodified; we pronounce an H at every expiration.

De Kempelen reckons, moreover, only three letters as mutes, and he ranges two of the explosive sounds, B and D, in the same class with sounds like M and N, that are capable of being indefinitely prolonged; on all which accounts his system of the alphabet appears to us objectionable.

There are much greater errors in the method (now commonly used among grammarians) of dividing the non-vowel sounds into dental, D, T, S, Z, &c., labial, B, P, V, F, palatine, G, K, L, R, and nasal, M, N, and NG.

Of these sounds, F and V, among the labial, cannot be formed without the assistance of the teeth; D and T, of the dental, are not formed by the teeth at all; R, of the palatine, is chiefly formed by the vibration of the tongue; the nasal M requires the same position of the lips as the labial B, and the nasal N the same adjustment of the tongue as the so called dentals D and T. In an arrangement formed upon this principle, indeed, however carefully the letters may be disposed, similar errors will always appear. Of several organs concurring to produce a sound, no one can be reckoned

* I have a great mass of letters from different persons, addressed to Dr. Burton, and which attest the truth of the above short narrative. I had intended entering more at length upon the subject in a separate publication, but have been obliged to abandon my original design from want of leisure.

the most important, because all are equally indispensable; and whether a letter that is uttered with the lip and the teeth shall be called labial or dental, is, after all, but a matter of arbitrary choice. But since, for the right comprehension of the subject, a correct classification is very essential, we shall here offer a new division of the English alphabet, in which we believe none of these discrepancies will be found. De Kempelen and others have cut off a great source of confusion by classifying sounds instead of mere letters (which often represent three or four sounds a-piece); and we believe that an equal cause of error might be removed by limiting the application of the term *consonant* as we have here done.

There are thirty elementary sounds in the English language, of which eleven are vowels, thirteen *sesonants*, and six consonants.

§ A vowel is a musical sound compounded with the feeble undulations of a secondary tone. The vowels are distinguished from each other by the pitch of the secondary tone, and since this may vary indefinitely, the number of possible vowel sounds is unlimited.

The eleven vowel sounds used in the English language are

1. The sound of *a* in *ah*.
2. The sound of *a* in *tall* (written variously, as in *caught*, *thought*, *law*).
3. The sound of *a* in *bane* (written variously, as in *faint*, *feint*).
4. The sound of *a* in *hat*.
5. The sound of *e* in *he* (written variously, as in *been*, *bean*, *receipt*, *thief*, *y-es*).
6. The sound of *e* in *hen* (written variously, as in *friend*, *head*).
7. The sound of *i* in *him* (written variously, as in *hymn*).
8. The sound of *o* in *so* (written variously, as in *sow*, *float*, *hoe*).
9. The sound of *o* in *move* (written variously, as in *root*, *route*, *shoe*, *qu-een*, *when*).
10. The sound of *o* in *done* (written variously, as in *dun*, *tough*, *he does*).
11. The sound of *o* in *Don*.

The *i* and *u*, in *kind* and *cube*, are diphthongs, as Sheridan observed; the sounds represented by what are called short *i* and short *u* are the 7th and 10th vowel sounds in the above series. It is common to distinguish the *a* in *hat* as short *a*, and that in *hate* as long *a*. But this distinction (and the remark applies to the other vowels) is fallacious. *Hat* may be lengthened out indefinitely without ever becoming *hate*, and *hate* may be pronounced as quickly as *hat*, without being converted into that sound.

§ The *sesonants* are non-vowel sounds, capable of being uttered alone. They are F, L, M, N, R, S, V, Z, TH in *thank*, TH in *than*, SH in *nation*, ZH in *vision*, and NG in *singer*.

They are divided into *aspirate* and *vocal*.

The aspirate are formed solely by the breath issuing from differently shaped apertures; they are F, S, TH in *thank*, and SH.

The vocal are formed by the breath issuing from variously-shaped apertures, but accompanied by laryngeal sound; they are L, M, N, R, V, Z, TH in *than*, and ZH.

§ Consonants are sounds *incapable* of being uttered alone,—they are, in fact, mere *methods* of beginning or ending the vowels and *sesonants*; they are B, D, G, in *egg*, P, T, and K.

They are likewise divided into aspirate and vocal, which differ in the manner before explained.

The aspirate are P, K, and T.

The vocal are B, G hard, and D.

Many of these sounds are, like the vowels, represented each by several characters; and, on the other hand, there are some letters which correspond to three or four separate sounds. Thus the sound SH has four written characters, in *passion*, *fashion*, *ambitious*, *delicious*; and the character S four distinct sounds in *this*, *his*, *sure*, *decision*.

The letters omitted in this system are C, G in *genius*, H, J, Q, W, X, and Y. Of these C and Q denote the sounds of other characters; W is the ninth vowel sound at the beginning of a word, and is silent at the end; Y is the fifth vowel at the beginning of a word, the seventh vowel at the end, and the diphthong I in the middle; H is merely an aspiration; G or J, and X are compound sounds, the two first denote the vocal *sesonant* ZH begun by the vocal consonant D, and the last represents the aspirate *sesonant* S begun by the aspirate consonant K.

It will be found that there are five primary positions of the organs of speech, to which all the simple non-vowel sounds may be referred.

1. Thus for B and P the lips are closed, the tongue is kept in its usual situation, the soft palate is raised to stop the aperture of the nostrils, and the air is suffered to escape suddenly by opening the mouth, a vocal sound being uttered in the first case but not in the second. M is produced by the same position of the mouth and its contents, excepting that the soft palate is depressed, so that the air escapes in an uninterrupted stream by the nose.

2. D, T, and N bear precisely the same relation to each other as do B, P, and M. For all three the end of the tongue presses the palate, the lips are open, and the teeth not used; for the two first the nostrils are closed by the soft palate, and for the last the soft palate is depressed, and the air issues continuously through the nose.

3. The same analogy and the same distinctions will be found to exist between the three sounds, hard G, K, and NG, for which the tongue is applied to the palate further backward than in the last position. Thus there are a vocal and an aspirate sound, issuing by the mouth, and a vocal, issuing by the nose, in each group. What M is to P, such is N to T, and such is NG to K. The positions, too, have a regular gradation in regard to the size

of the cavities they respectively form. The cavity formed by closing the lips for B, is the largest possible; that formed by applying the end of the tongue to the palate for D, is the next in size, and that formed by raising the hinder part of the tongue to the palate for hard G, is the least of all. By raising rather more of the tongue than for D, and rather less than for hard G, an intermediate sound is produced, neither a distinct D nor G, but partaking of the characters of both. Of course a group of three sounds might be obtained by this position just as by the others, and there may possibly be languages in which such a series is used.

Thus these three positions are turned to good account, and the difficulty of learning to pronounce nine sounds is reduced to the difficulty of acquiring the articulation of three.

4. The under lip is applied to the upper incisors, soft palate raised, tongue not used. The aspirate F and its vocal V are formed by this position.

5. The tip of the tongue is placed between the upper and lower incisors, lips open, soft palate raised. The aspirate TH in *thank*, and its vocal in *than*, are thus formed.

L, R, S, Z, SH, and ZH, are formed by slight modifications of the second position. For L, the air is permitted to escape by the sides of the tongue; for R, the tip vibrates against the palate; for S and Z, the air is suffered to escape between the end of the tongue and the palate; and for SH and ZH, between its central part and the palate, the tip being slightly turned downwards. These letters were not mentioned in their place with D, T, and N, to avoid confusion in pointing out the relation between the three first groups. We here observe several distinctions that might have been used in our arrangement of the alphabet, such as sounds issuing through the mouth, and sounds issuing through the nose; sounds partially interrupted, and sounds perfectly free; hissing sounds, pure sounds, mixed sounds, &c.; and such groups have been introduced by some into their systems of the alphabet, and supplied with appropriate names; but we think it better, in order to avoid complexity, to make these characters matter of after-description; for if inaccuracy is on the one hand, so is over-niceness on the other, destructive of the advantages of classification. It is easy to be accurate, by making a variety of groups and definitions, but then the object of arrangement is defeated, because the memory is encumbered instead of helped; it is also easy to form a simple system, by coniving at little inaccuracies, but here is an equal fault, for the learner is led into error; the difficulty is to form a system accurate and simple at once, with names and definitions perfectly apt, and yet sufficiently few. Bishop Wilkins and De Kempelen err in these two extremes; we have endeavoured to hit the medium,—with what success the reader has to decide.

In attempts to imitate speech, the least modifications of position must be carefully studied, since they often have great influence on the character of the sound; in such observations De Kempelen's work will be found a very valuable guide.

We learn from the foregoing remarks upon the alphabet, that the series of sounds F, K, P, S, T, TH in *thank*, and SH, are converted into the series V, G hard, B, Z, D, TH in *than*, and ZH, by a mere addition of laryngeal sound; if, therefore, the first of these series were once mechanically obtained, the addition of a musical tone would afford seven new articulations; we see also that if P, T, and K were once imitated, M, N, and NG, would be secured by simply changing the aperture for the escape of the air,—and so on for several others. The difficulty of forming a complete English speaking machine is thus reduced to the perfect imitation of the eleven vowels, and of about a dozen non-vowel sounds. Such an instrument would be much less complex than one is at first thought led to imagine; each sound would require a key, and by these, with two or three stops to produce the changes from aspirate to vocal, &c., the whole instrument might be perfectly commanded.

The vowels in their minutest modifications are already obtained; how far De Kempelen has succeeded in surmounting other obstacles, will form the subject of our following paper.

(To be concluded in our next.)

ABSTRACT OF THE EVIDENCE TAKEN BEFORE THE PARLIAMENTARY COMMITTEE, IN 1834.

(Continued from page 751.)

Sir ANTHONY CARLISLE examined.

Q. "Is not the (precious, humbugging) ad-monitory address now discontinued?"—A. "No, it is always read: and is generally accompanied by some (savoury) observation from (such wisecracs as myself) the seniors, pointing out to the juniors in *council* (but not in *wisdom*) what are the *rightful* pretensions of a man to be elected; but without mentioning (in the farce) the names of the individual candidates. At a second (farce?) meeting of the COUNCIL (*facetiously so called*) they proceed to the election (no doubt with exceedingly pure and disinterested intentions, after hearing the mutterings of some nonagenarian like Sir Wm. Blizard). The *chronological* list is again read over to the Council; and if the same five names of the *pre-supposed* eligible candidates are *stopped* as before, that part of the (farce) proceeding ceases. The first in order of the five has to be proposed and seconded in order to be elected, but if not he is passed over; and so on, perhaps, until the fifth, who is perhaps chosen. (Now, sapient Sir Anthony, stand up, and tell us, if some flaw were found in all the five, what

your proceedings would be afterwards. A new batch?) The ballot is determined by a majority, and the Chairwoman has not a casting vote.

Some questions followed, respecting Sir Anthony's expression of "*public men*." Sir A. had said that those elected into the Council ought to be *public men*; and Mr. Warburton, not exactly comprehending what the "knight of the ludicrous phraseology" was driving at, shored him with a few interrogatories, calculated to clear the fog which the poor knight had conjured around his caput. He floundered on to the best of his capacity, but although both a Councillor and Examiner, at last ran his pate against the following question. Q. "How long has this *more enlarged* interpretation been put upon the word *public*?" A. "I think it has been the case ever since I belonged to the Council. I was elected because I was a public man (not a publican!) I (again, God save the mark!) I was not known (or heard of) to one fourth part of the members of the Council, and was even neglected (cudgelled?) by my colleague, (pal?) with whom I was at (fistycuffs?) variance at the time."

Q. "Who is it that reads your (savoury) admonition to the members of the Council, and teaches them that they ought to elect *public men*?"—A. "I do not know that the words *public men* are mentioned *excepting* by such persons (blockheads!) as myself. I think that *public pretensions* are the fair claims for *public station* and for *public functions*. (Oh, Anthony, Sir Anthony! Who, in the name of gin-and-water—you understand—taught you all this? Thieves and pickpockets have public pretensions. Cats' meat-men and costermongers are public men. Quacks, too, have an undoubted claim to the same designation. Do, Anthony, do, in the name of your hatred to the worshippers and followers of Lucina, leave off, for the future, your humbug about public men.)

But let us proceed. Something was said after this, by our learned knight, about men being public, but not public enough. "I believe," quoth Anthony, "that this (the phrase *public men*, as applied by him) is a mode of speech among ourselves, which is not on record: it is *only* a feeling (*feeling*) which GOVERNS our actions."—Chairman. "Then you mean that the persons chosen should have eminence."—A. "Aye, aye!" Q. "Eminence, *howsoever* acquired?"—"Aye, aye!" quoth the scornor of midwives. Q. "According to your present mode of election, a person either once passed over in the *preparatory list* (mark that), or once black-balled, though he were subsequently to abandon pharmacy, or were to acquire the *well-merited* title of a *public man*, could never again have the opportunity of being proposed for admission into the Council?"—A. "I believe that that is not *written*. I think that is a *silent understand-*

ing among us." (Aha! Sir Anthony, may not a written understanding be a silent one, eh?)

Our knight now introduces himself into a quandary. Q. "Is the present mode of choosing the members of the Council, in your opinion, a good one?"—A. "I humbly (*quære*, arrogantly?) submit that to be my opinion. Looking at the men now in the Council, I do not know that *much* fitter men could be found in London. We are all sufficiently *rivals* to be independent of each other; and as not any three men among us agree upon any subject, there, as in other places, we cannot be an united despotic body."

Q. "The members of the Council being, a large majority of them at least, either Hospital surgeons, or lecturers, and it being one of their duties to decide what hospitals or schools shall be recognised, are they not subject to the imputation that they frame regulations for the recognition of schools and hospitals not wholly without regard to their *own* personal interests?"—A. "There is some ground for that accusation." Q. "The College of Surgeons of Edinburgh admit among the Examiners a certain proportion of junior men?"—A. "I confess that every person improves as an examiner, in his tact, in his perspicacity, and in his mode of examining (what verbiage!), as he advances in experience. THAT (glorious climax!) is MY observation upon IT." Q. "Do not seniors as they grow older (and more obstinate), and when they cease to dissect, forget their knowledge of minute anatomy?"—A. "When a man has once been well established in the knowledge of the details of anatomy, and has practised as a surgeon for twenty or thirty years, *having to rehearse* his anatomy previous to every operation, it is *impossible*, unless his faculties fail him, that he should forget the *great leading* features of anatomy. (This is no answer to the question which regarded *minute* anatomy.) Now, I am of opinion that a man's infirmities and *not his age* (Look, what an old fellow I am!) create his inability. When we see *such a man* as Prince Talleyrand, the most acute and the most powerful minded man in Europe (?), and that he is turned of 80, I think we *may* say that a man (or old woman) at 80 might be a member of the Court of Examiners of the College of Surgeons." (Verily, a very old man's opinion.) Q. "If you were to divide an assembly of twenty men, the age of whom was 36 years and upwards, into ten seniors and ten juniors, in which party would you seek for the men in the greatest vigour of their faculties?"—A. "Among the old men, to be sure; for if the old men had not lost their faculties by drinking, &c., they would be the finest Fellows, because an examination, *like ours*, must be conducted with great perspicacity and judgment." (ergo) Q. "By the caveat—'IF they had not lost their faculties,' are you not assuming that *not* to have happened which pro-

bably *would* have happened to the seniors in question. Would not their wits grow weak with age?"—*A.* "The cleverest fellows I have ever known are the present members of the Council—the *old fellows*, especially. I consider the sagacity of a man to progress with his years; and, *unless* he gets drunk or diseased, he accumulates wisdom (as I have done) until he snores his last. Men of originally strong minds *continually* improve by the agglomeration of experience, (What a snow-ball!) *while weak men* become bigger fools the longer they wear." *Q.* "Do you approve of excluding from the Council members of the College who practise midwifery or pharmacy?"—*A.* "Their *pursuits and habits of business* (hear! hear!) are *widely* different from those of surgeons (to reason from exceptions). Neither Mr. Hunter, old Cheselden, nor Cline, would have *liked* to have kept a shop and to have sold medicine. Such offices are derogatory to the dignity of persons who are to be rulers (!) or legislators (!!) in their profession." (Pretty pompous). *Q.* "Is it not often necessary that the practitioners in midwifery should perform dangerous and hazardous operations in surgery?"—*A.* "So *THEY SAY*, perhaps (with a knowing shrug); I think differently (a wink here). Parturition needs no surgeons. I *know* the profession hoot me about this, but that is because they are a set of blockheads." *Q.* "Are there not cases in midwifery when the patient must either die or have some artificial succour?"—*A.* "I *have had no experience*—but in all cases to which I have been called, it has unfortunately *turned out* that some *obtrusive mistake* (obstetricians, hear that), some specious, artificial interference has first *happened*; and, generally, that which was predicted (how clear!) did not *turn out* to be true. So that the interference (how we jump to conclusions) was either destructive to the life of the child, or was found afterwards to have been unnecessary. *That is my experience.* I may, *THEREFORE* (so you may) be a prejudiced man, (why not?) but I think *MY* opinion is confirmed (!) *WHEN* I consider that the whole empire of China, (*holus bolus*) ranging over the greatest space of any nation in the (known) world, (there may be some spot which is not in the map where midwifery is cultivated) have no, not even women, midwives; *OF COURSE* the African nations the *same*, (!) and the *Hindoos the same*" (!!) (*more sudden conclusions*). *Q.* "In the early part of life did you ever practise midwifery?"—*A.* "No!!!" *Q.* "Is parturition much affected by climate?"—*A.* "I stick to China."

(To be continued.)

THE

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THE INCREASE OF EMPIRICISM.

OUR pages have frequently been the medium of exposing quackery, and bringing its perpetrators before the public eye. The immense evils which every day occur to society from the machinations and devices of men of this description demand exposure, and in no instance can the pen of the journalist be better employed than in bringing to light their nefarious traffic, and making the community aware of their trickery. Unfortunately, the sale of secret remedies, and the profession of possessing panaceas, are not confined to the ignorant and vulgar. Members of the Royal Colleges have been, and are known to be, participators in the knavery. The following is a precious specimen of the charlatanism now on the march, and growing more and more common daily.

"DR. K——Y,

"SURGEON AND MAN-MIDWIFE,

"*Ratcliff Highway,*

"Respectfully informs the inhabitants of Shadwell and its vicinity, that he has commenced practice in the above place, and may be consulted from *seven A.M.* to ten o'clock at night.

"Dr. K., aware of the impositions practised on public credulity by itinerant and inexperienced individuals, and also satisfied as to the reluctance of the regularly bred members of the profession to advertise their pretensions, should forego addressing the public in the present form had he any other means of giving publicity to his pretensions; moreover, he has no patronage to rely on, unless that to which professional ability lays claim.

"Dr. K. rests his claims to public pa-

tronage,—1st. On the circumstance of having been, from an early age, familiarised with the treatment of serious cases under his late poor dear father, whose practice was respectable and extensive.

“2ndly. From the varied experience which he has derived from uninterrupted attendance during a period of nearly twenty years in one of the largest fever hospitals and dispensaries in the United Kingdom. *Four thousand* cases on the average came annually under his treatment.

“3rdly. From his having been for some years garrison-surgeon, and also from association with some of the most eminent practitioners in France, Spain, &c., with whom he consulted and co-operated in the treatment of various cases of a serious character.

“4thly. Dr. K. is not so presumptuous as to say he can cure all disorders, but *trusts*, from his extensive practice and long experience, to be enabled to give a decided opinion as to such cases as are curable and such as are incurable. **MOREOVER**, from the practice which he has adopted of ‘**NO CURE NO PAY,**’ he will not undertake anything unless he is **MORALLY** certain of the results of his mode of treatment.

“Dr. K. has devoted particular attention to the diseases of women and children. He **PLEDGES** himself to be in possession of an effectual remedy for that dreadful malady **CANCER**; a remedy that completely **EXTIRPATES** it, and one which is not known to three individuals in the United Kingdom. Its successful application has been ascertained in various cases of a very serious nature. Reference can be given to very respectable persons who have been cured by him. It will be admitted that the varied experience derived from a long attendance in dispensaries,

fever hospitals, &c., must necessarily familiarise a medical practitioner with the treatment of those diseases to which the community are in general most liable. In conclusion, Dr. K. wishes to observe that there are some respectable persons in **LONDON** who, either from personal experience or authentic information, can guarantee the sincerity of his profession as to experience and successful treatment of cases in general.

“Ladies attended in their confinement at half the usual fee.

“Advice to the Poor gratis from 9 to 10 o'clock each morning.

“Surgical operations, *cure of CANCER*, &c., also gratis to the **POOR**.

“A large supply of medicine *on the LOWEST* terms.

“Cures in a family undertaken at so much per head.”

Now, who that read this precious document would believe that its promulgator was no more nor less than a member of the College of Surgeons in Dublin? Yet such is the case. This gentleman, who can cure cancer, and we verily believe, if pushed hard, would profess to restore life to the dead, *is* a member of the Irish College of Surgeons.

What, we should like to know, is this worthy member's remedy for cancer? If he really has one, the keeping it a secret cannot be justified, since society at large has an incontestable right to all acquired truths. And if among the innumerable inventions continually professed to be found out by quacks, some are really beneficial to mankind, what right has the inventor to keep them secret? if hurtful, what right to publish them? Besides, who knows not how ridiculous and deceptive are all these claims to invention? Talbot's remedy, which came out in 1682, was common bark, the properties of which

had been known for the last fifty years. The anti-dysenteric powder of Helvetius was ipecacuanha. The real value of the remedies of Miss Stephens and Pradhier against gravel and gout, are now duly appreciated; and the receipt of Mahon against scald-head, is far from being a solitary instance of disgusting quackery in the treatment of that disease. That regularly educated members of our profession, should adopt the system of puffing established among empirics, is a matter for regret, and one which we sincerely trust a wiser code of laws governing the medical body will obviate.

THE MASK OF NAPOLEON BUONAPARTE.

WE doubt not but our readers will feel highly interested in the account of the mask of Napoleon Buonaparte, which we publish in this day's number. The truth of the statement appears manifest; and it will be difficult now for Dr. Antommarchi to appropriate to himself the honour which ought to belong exclusively to Dr. Burton.

That so faithful a memorial as a mask taken from the features of the hero who astonished the world with his achievements is in existence is gratifying; but much more pleasing will it be to find that Dr. Antommarchi, moved to late repentance, restores the mask to that portion of the model which is still in the possession of our countrymen. The character of the head, as well as of the face, might then be represented with fidelity, and the admirers of Napoleon receive from the hands of art a resemblance of him, which would be valuable in proportion to its truth.

PROPOSED CHANGES IN THE BY-LAWS OF THE WESTMINSTER HOSPITAL.

THE hospitals of medicine and surgery in London are certainly worse governed than in any other part of the habitable globe; rather a surprising fact, when we consider the acknowledged intelligence and talent of its inhabitants. The principal charge against these administrations is, that they have not any pretensions to unanimity: the committees of management and the medical officers have constant quarrels, and the latter are but seldom agreed among themselves. It may be fairly and truly said, that among these institutions of discord, the Westminster Hospital stands pre-eminent. Subject to the real control of a Weekly Board, acting without incurring any responsibility, and under the nominal authority of a Committee of Management, enjoying all the responsibility, without any of the authority which it should possess, this charity has been for years a scene of discord; parties among the governors, and parties among the medical officers were constantly forming, and even the most trivial circumstances were almost uniformly seized upon, to be converted into fuel for the strife. The laws which were made one week, were liable, instead of being confirmed the next, to be reversed: the party which was beaten at one meeting might yet hope for victory, by making a grand muster at the next. When the amount and constitution of a Board is ever changing, dependent on a variety of causes, the caprice of individuals, or the wish to carry or reject a mooted point, but little real good can be effected; and this has been fairly exemplified in the proceedings at the Westminster Hospital. Every person, as the laws at present stand, on paying three guineas yearly, can, at the expiration of three months, attend the weekly board, where he has a vote: consequently, one week persons may attend who may not be seen again for the next twelvemonth, while the old stagers, who go on prosing from month to month, when by chance they do stumble on a measure which may benefit the Institution, are liable to have all their efforts defeated by a sudden influx of the small fry, who attend at the beck of some "Sir Oracle."

Such may be considered as the principal reasons which induce us to hail with pleasure a proposition that a Committee of Management should be formed, in lieu of this same weekly board, the members to be chosen annually by the great body of the governors, although this latter proposition is not free from blame. As very few of the governors of these charitable institutions ever care anything more about them than just paying their subscriptions and seeing their names blazoned forth in the list of subscribers, there can scarcely be a doubt but that the election of this committee will

soon be vested, *de facto*, although not *de jure*, in a small and select class of the governors or trustees, call them which you will, who will be sure to put in themselves or their friends, so that ere long the institution would become a thorough close borough. Still this evil, as the committee's proceedings would be always open to the revival of the general court, and will be sufficiently public, is preferable to the system hitherto adopted of a weekly board, composed of whoever chose to attend, (provided he paid the three-guinea fee,) abrogating, or materially altering laws passed or agreed on within a week of the meeting.

The recommendation we have just noticed emanates from a committee, which has been appointed to revise the laws and regulations of the Westminster Hospital, whose report has been just published.

We mean not to assert that none of the measures they have recommended are advisable; on the contrary, we have already given our qualified approbation to one, that one which they consider the most material, namely, the appointment of a house-committee of thirty-six governors, in lieu of the weekly board.

With the general laws we shall not meddle, although several of them require alterations; we shall content ourselves with paying our respects to those more especially bearing on the medical officers and the profession. These come, strictly speaking, within our ken, and we shall give them our best attention.

The first on the list is one stating the numbers which are to compose the medical staff of the hospital in future.

"The medical establishment SHALL consist of three physicians, a consulting surgeon, three surgeons, an assistant-surgeon, an apothecary, a house-surgeon, and a clinical assistant.

"N.B. Although the present establishment is not in conformity with this rule, the Board, held this day of _____, order that on the occurrence of vacancies it SHALL be reduced to the above specified numbers."

Mark, we pray you, this authoritative SHALL; it SHALL consist, and it SHALL be reduced: by our lady, Bajazet must have come to life again, or else Pythagoras was right, and the haughty spirit of that indomitable leader now inhabits the bosom of the author of these portentous SHALLS; it can be no other; a mere Englishman would never of himself have given utterance to such language.

But, reader, mark further, the staff at present consists of three physicians, a consulting surgeon, four surgeons, &c., &c., and the nota bene expressly states that on the occurrence of vacancies it shall be reduced to the above numbers. As the Committee in their collective wisdom have thought proper to have a consulting surgeon, it may be inquired why they have not also appointed a consulting physician, and to those not in the secret, it

may be considered a difficult question to answer, save with the celebrated reply, "*Sic volo, sic jubeo, stet per ratione voluntas.*" Still, however, we are not yet on the right scent; there is not any one of the physicians whom they are desirous of withdrawing from active duties. Should they deem any of their medical officers fit to be superannuated, then we should hear of "Dr. _____, consulting physician to the Westminster Hospital." How is it the hospital went on for so many years without a consulting surgeon, before Mr. Lynn's appointment, or what need was there of such a berth? If it be not wanted for the physicians, how is it required among the surgeons? Surely it can never be expected that Mr. Lynn will come from Clapham to assist at or direct a consultation? No! his very precarious state of health forbids it, and the berth is kept up, in the expectation of a vacancy, when the *now* senior surgeon may be induced to accept the Chiltern Hundreds of the Westminster Hospital. In this manner do they propose to get rid of the fourth or supernumerary surgeon, and in this way do they intend causing the vacancy alluded to in their postscript.

We have not space enough to examine into the question whether there should be three or four surgeons; it can matter but little, provided those who hold the office do their duty effectively; we have known a much larger hospital properly attended to by even fewer medical and surgical officers; we do not, therefore, object to the reduction, but to the manner in which it is proposed to be executed, and also to the proceedings relative to the intended vacancy.

No. 14 says—"All governors being of the medical profession, have liberty to attend any operation in surgery performed in the hospital." This is not by any means sufficiently liberal; all legally qualified members of the medical profession should be admitted, not as a favour, but as a right; we do not think it would be abused.

There is a paragraph in Law 21 to the following effect:—"A committee, consisting of the medical officers and seven other governors *conversant with medical subjects*, to be called the Medical Committee." * * * The vagueness of the expression, *conversant with medical subjects*, can never be sufficiently admired; it is just a loop-hole constructed for the admission on the committee of several druggists residing in the neighbourhood, who are regular attendants on the weekly board, and, as men of a certain influence in those parts, are of course to be conciliated. They are doubtless very respectable men, men whose assistance to the house committee would be invaluable, but who are not at all fitted to be members of a medical committee. If the professional governors of the institution are wise, they will have the phrase "*conversant with medical subjects*," altered to "*members of the medical profession.*"

No. 39 involves a great and material change in the constitution of the hospital, as regards its officers. It is said that this new law has met with the approbation of the medical officers: such approval, however, does not stamp its character, nor alter the impropriety of such an innovation. "All officers of the establishment, the patrons, president, and vice-presidents excepted, shall be appointed annually at the first quarterly general board, and the same individuals SHALL be re-appointed, unless some grave neglect of the duties prescribed by the laws of the hospital, or incapacity on the part of one or more individuals to continue the efficient performance of his duties, be satisfactorily established before a general board.

Note.—"This rule SHALL not apply to any of the medical officers who were elected previously to the 1st March, 1834."

Thank Sir Absolute again! SHALL for ever!

On this clever paragraph we have the following commentary in the preliminary observations.

"The object of this, as regards the medical officers, is to give the governors an opportunity of dispensing with the services of a gentleman when by reason of age or *other causes* he may have become, in their opinion, incapable of performing his duties efficiently, without wounding his feelings, as they must do if they dismissed him under the existing regulations. At the same time the Committee have taken pains to guard effectually against any opposition to the re-election of an officer from capricious or interested motives. Having consulted the present medical officers, and procured their assent to the principle of the rule proposed, the Committee do not anticipate any objection to it."

Oh, faith, ye are clever chields! Ye will not hurt his feelings, honest man, by making him consulting surgeon, but when the year has gone round, and the election-time has again arrived, ye will touch the hat to him, and say, ye shall dispense with his services in future. Why, is it not self-evident, that if the officers are not to be turned out of place (aye, that is the word), unless incapacitated by age, grave neglect, or some *other cause*, when such an event does occur, the party will have his feelings as much hurt as if he were dismissed "under the existing regulations." No; this new rule is proposed solely, we believe, with the view of making the medical officers, who occasionally are rather restive, more subservient, for fear of losing their situations.

"Oh! fie, fie for shame,
Forsooth, ye are to blame."

We may return to this subject in our next: there are a few more of these regulations require examination.

CLINICAL INSTRUCTION.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—In one of your late numbers I observe that a student of St. George's takes upon himself to dictate to you, as well as to the medical profession, the means by which Clinical Instruction should be taught in this metropolis. He goes so far as to persuade you to believe that this branch of medical study should be taught every day throughout the year. I confess, gentlemen, that I feel surprised you should have allowed such stuff to appear in your excellent Journal; for I would ask this *wise student in physic* of St. George's, if it were possible for him or any student to hear or comprehend, or at least retain, any part of three clinical lectures delivered in one day, by three men, perhaps altogether of different opinions on the theory of physic. He might, certainly, by hearing so many have the same disease as occurring under two of the physicians, and better be enabled to understand the treatment of such particular affections. But, supposing for a moment that three lectures were delivered daily on clinical medicine, would it be possible for all or any of the students to attend any one of them regularly, and at the same time pay that attention which they ought to the other lectures? The answer is too plain to require any explanation. At present certainly, with the exception of one hospital in this large city, the lectures on this subject are only delivered once a week, which is not often enough. I see no reason why hospital physicians should not deliver their clinical remarks at the time they visit the patients in the hospital, so as to follow the industry of one of the most liberal in the profession. I allude to the Professor of the Practice of Physic at the London University, who never thinks of going into the hospital to see any of his patients, without endeavouring to impart to those around him, his reasons for giving this, that, or the other for any of the diseases that might be under his care. This might be done without wasting too much of the valuable time of the teacher, and also without being too great an encumbrance on the time of the student. By your allowing this a place in your publication, you will greatly oblige

Your obedient servant,
A STUDENT.

July 13th, 1835.

MAD DOGS.

ALTHOUGH so many have of late years been afflicted with that dreadful disease hydrophobia, the cure of which is so well known to have baffled all medical skill, yet we are daily

in the habit of observing numbers of stray dogs wandering about the streets, and what is much worse, are frequently obliged to witness many of our fellow-creatures undergo painful operations to free them from the torments of such a destructive complaint. Not many days since a policeman stationed near the New-road, while on duty, was bitten in the thigh by one of these animals, which, though there was every reason to believe it was not rabid, yet for the safety of the individual, the part was deeply cauterised. The laws respecting stray dogs, we know are not very lenient, and why they are not more frequently put in force, we are at a loss to imagine. It is a well-known fact, that dogs, even when in a state of rage, may communicate this dreadful malady without being in a rabid condition at the time they inflict their bite, consequently caution is much more requisite.

RUPTURE OF THE HEART BY EXTERNAL VIOLENCE.

BY DR. J. SALLUCE, OF MIGLIONACCIO.

THOMAS TRAJETTA, ten years of age, received a severe kick from a horse on the sternum, soon after eating. The unfortunate child fell down, and expired in the act of vomiting the food, which was not in the least changed. The next day, on examination of the body, the only external mark was a slight contusion over the sternum. The abdomen contained a large quantity of gas, as likewise the stomach, in which also there was some food, partly digested. The liver and spleen presented signs of an old obstruction; the other abdominal organs were healthy. On the left side of the thorax there was a considerable quantity of black coagulated blood, the source of which was a laceration of the base of the heart, about five lines in diameter, communicating with the right ventricle. The lungs and brain were sound.

ON THE DISEASES INCIDENT TO CARPET-DUSTERS.

BY DR. PARENT-DU-CHATELET.

OF all the writers who have given themselves up to hygeic researches few have shown more sagacity, more courage, more disinterestedness than Dr. Parent-du-Chatelet; he has with unwearied perseverance sought to appreciate the influence which almost all professions exert on those who exercise them or on public health; and the numerous memoirs inserted by him in the "*Annales d'Hygiene*," or elsewhere published, are all authentic sources which may be alike consulted by the physician and the magistrate.

British Hospital Report.

NORTH LONDON HOSPITAL.

CLINICAL REMARKS, BY PROFESSOR ELLIOTSON
ON THE PROGRESS OF A CASE OF ASCITES.

After relating some cases of colic arising from the ill effects of lead in the system (the practical portion of which we published in No. 179, p. 735), in which creosote had been of great service in stopping the vomiting, the learned professor remarked,—There is a case of ascites in the hospital at present which I would have you observe, and compare it with one which was dismissed a short time since, whose case at present may be observed in the clinical book. The woman's name is Ann Thorn, admitted on the 6th of July. Whilst pursuing her occupation as char-woman she caught cold, and her face began to swell, as did both legs, the abdomen, the right arm, and side. Cold is generally the predisposing cause of a dropsical attack, and then swellings are the first symptoms which are usually observed. Her urine was scanty and high-coloured; there was diarrhoea, and a large fluctuating swelling of the abdomen; the skin of the legs was red and tender; and she had a dry cough, with sonorous respiration on both sides of the chest; pulse 70, hard. There is no tenderness or redness arising from inflammation of the cellular membrane, so that we are obliged to judge by the buffy appearance of the blood. As I considered this species of inflammation to exist in the woman, I ordered her to be bled, and gave her two drachms of the tartrate of potass to remove the constipation of the bowels. The next day she felt better, the urine was slightly increased in quantity, and her bowels had been freely opened; the blood, as I expected, was buffed. I have since ordered her half a drachm of our solution of the hydriodate of potass three times a day, not only as a diuretic, but because it is very useful in contributing to the cure of chronic inflammations. If the secretion of the fluid is very great, she will probably require to be tapped, and no doubt it will take a long time before she is cured. I mention the case in order that you may watch the progress of the disease, and notice the effects of the medicines which will be given for its cure.

There was a woman dismissed a short time ago, about 22 years of age, who had been admitted towards the end of January last, affected by the same disease, and exhibiting nearly the same symptoms as the woman Thorn. She was a married woman. About fifteen months before her admission she caught cold, being pregnant at the time. Soon after this she observed pain in one of her legs, and in a very short time both became affected, and they began to swell a good deal. She had a slight cough, which was much increased by this

cold, attended by copious expectoration. The abdomen was very much distended, and she had much difficulty in breathing. Dyspnoea in these cases does not appear to arise from any mechanical cause, such as pressure of the enlarged abdomen on the diaphragm, &c., but from the concomitant inflammation, the breathing of patients who carry a very large quantity of fluid not being affected if no inflammation be present. She retched violently, had considerable pain in the epigastric and left hypochondriac regions, and the peritoneum was in an inflammatory state; it appeared also that she had not had sufficient food for a considerable time before her admission. As she suffered much uneasiness from the abdominal distension, she was tapped, and eleven quarts of fluid were drawn off. She was bled to four ounces, on account of a severe pain in the epigastrum, took five grains of the hydrargyrum cum creta several times in the course of the day, and had a large blister applied over the epigastric region. Twelve leeches were applied to the abdomen on the next day to relieve some pain which she felt there. This pain was gone on the following day, but there was uneasiness around the kidneys, and the urine was scanty and high coloured. These symptoms, with heat, acceleration of pulse, &c., evince an inflammatory condition of the urinary organs, which entirely prevents the operation of diuretics, even when administered with the greatest prudence and caution. I have frequently seen diuretics given without the slightest effect, while the urinary organs were in this condition, but they have almost invariably operated in a perfectly satisfactory manner directly the inflammation was removed by bleeding or antiphlogistic remedies. Tapping, also, often assists the action of diuretics,—of course by relieving the inflammation dependent on the presence of the fluid; indeed, I have seen cases where they have been administered in large doses and have not operated at all till the operation of tapping was performed, when their usual action was immediately restored. Acupuncture produces the same effect on their action, if a tolerably large quantity of fluid be drawn off.

Well, after the bleeding, blister, and leeches, with the hydrargyrum cum creta (which she still continued to take), had reduced the inflammation, I ordered her a continued course of diuretics, digitalis, and squills at first, and afterwards the hydriodate of potass, which, as I think I remarked before, is a very excellent diuretic, and is also exceedingly useful in lessening chronic inflammation, particularly that species which generally attends ascites. The dyspepsia and retching were opposed by hydrocyanic acid, which she took in four minim doses; but this failing to check the vomiting, creosote was combined with it, with the happiest effect. I shall not read you the minute details of the case, as they are not remarkable.

It appears that the doses of the hydriodate of potass were gradually increased, and she was taking forty-four minims of our solution three times a-day on the 17th of March, when she suffered a good deal from diarrhoea, accompanied by a large discharge of water from the bowels, which was checked by catechu. She was tapped two or three times, the abdomen being gradually distended after every operation, but the increase was less rapid after the latter ones.

On the 5th of May she was tapped, for the third time, I believe, when ten quarts of fluid were drawn off; at this time she was taking as much as eight scruples and a half of our solution of hydriodate of potass three times a-day.

On the 8th of June she was tapped again, and six quarts were drawn off, and the potass disordering the stomach, the dose was decreased to a drachm three times a-day.

June 11th. She was much more comfortable; appetite good; no indigestion or sickness, and the abdomen had ceased to increase. Soon after this she was dismissed cured.

This case shows you that you may decrease the chronic inflammation by the hydriodate of potass, and consequently the secretion of fluid, until at length it ceases. You remove that which is secreted by tapping, then by aperients, &c., improve the general health of your patient, and complete the cure. But, of course, you must be prepared frequently to meet with cases of this very obstinate disease, which will not terminate so favourably. This case is very similar to the case up stairs, and I think you will find it useful to compare them together. You will see the reasons for my treatment, and be able to form your own ideas as to its success or failure.

WESTMINSTER HOSPITAL.

Injury to the Knee—Abscess under the Fascia Lata of the Thigh.

EDWARD RONAN, ætat. 32, an Irish labourer, residing in Dean-street, Westminster, was admitted Jan. 22nd, 1835, into Mark's Ward, under the care of Mr. Guthrie. A week previous to his admission, he fell and injured the knee, at the same time striking the outside of the thigh against the ground. When he came in, there was a small ulcer on the upper and outer part of the patella, communicating with an extensive sinus running up the outside of the thigh; the integuments in the neighbourhood appear red and inflamed; by moderate pressure, applied downwards from the hip to the knee, three or four ounces of a thick sanguinolent fluid, of a brownish-red colour, containing small black coagula, were discharged from the ulcer. He complains of great pain, and cannot straighten the limb; the bowels are confined, and there is general disorder of the system.

He was ordered simple dressing to the knee, and a flannel roller to be firmly applied round the thigh from above downwards; fomentations.

R. Mist. Sir A. C., ℥ij,
Camphoræ, ℥ij.

H. fiat mist, capiat ager cochlearia larga, ij. ter in dies.

24th. Passed a tolerable night; is free from pain; bowels open; an ounce and a half of grumous matter discharged by pressure.—Continue.

25th. A better night; bowels open; two ounces and a half of the same kind of pus evacuated, principally by pressure on the outer hamstring muscles. Orders were given to attempt to straighten the limb.

26th. He passed a very bad night, unable to sleep from severe pain in the thigh, which still continues; a blush of erysipelatous inflammation has shown itself along the outside of the thigh, which, Mr. Guthrie observed, generally accompanies the burrowing of matter; pulse 90, full and frequent.

Mr. G. made an incision about an inch and a half long through the fascia, on the outer side of the thigh, giving exit to three or four ounces of grumous matter; he also directed the house-surgeon to enlarge the incision if it should be necessary.—The part to be poulticed, and the mixture to be omitted.

28th. Passed a better night; pain and inflammation diminished; considerable discharge from the wound in the thigh; the ulcer on the knee is nearly well; pulse regular.—Continue the poultice.

29th. He can now extend the limb fully, and is free from pain; discharge lessened; bowels open. Mr. Guthrie ordered the application of pressure above and below the wound, and a poultice to be applied over it; he added, that in such cases (to wit, deep-seated suppuration) it was always advisable to make the incision three or four inches long.

30th. The discharge continues to diminish in quantity and to improve in quality. Placed on full diet.

Feb. 2nd. Is going on well; simple dressing to the part, and a roller.

The discharge continued to diminish gradually, and he improved in his general health. On the 12th of this month the lips of the incision were drawn together by adhesive plaister, and on the 19th he was presented.

CASE II.—*Abscess*.—James Child, ætat. 54, residing at 2, Windsor-place, Rochester-row, was admitted the 3rd of Feb., 1835, under the care of Mr. Guthrie, into Henry Hoare's Ward. He is a native of Surrey, but has resided in London for the last six and twenty years; is a carpenter by trade, married, and has eight children. Is accustomed to take two or three pints of beer

daily, and occasionally a little spirits in addition. He reports himself to have enjoyed good health for the last fifteen years, with the exception of an occasional cold.

About a month before he laboured under the usual effects of a cold, which did not go off as usual, but were followed by severe rheumatic fever; the joints principally affected were the knees, shoulders, and phalanges of the hands; he experienced very little pain in the others. The attack was attended by loss of appetite, and symptoms of general *malaise*. He was confined to his bed from the severity of the complaint, but did not think it necessary to have medical advice. As the rheumatism got better, which it did about the third week, swelling and pain took place in the right thigh, and an abscess speedily formed about the centre of its anterior surface. He became an out-patient at the hospital, and had some opening medicine; he was likewise directed to foment the part.

On admission, he presented a tumour on the anterior surface of the right thigh, near the middle, and pointing, the integuments being of a reddish-brown colour, and evidently undergoing the process of thinning; the cuticle was desquamating in parts; fluctuation was very distinct. He had not had any rigors previous to admission. The general health was much disturbed; the tongue foul and furred; bowels freely open; appetite much impaired; mouth parched and dry; thirst not great; pulse quickened; countenance anxious. Mr. Guthrie made an incision in the centre of the swelling, and a large quantity of thick pus was evacuated; a director was then introduced, and the parietes laid open to a considerable extent above and below; more pus was squeezed out by applying pressure above and below, and afterwards laterally.—Poultice and house-physis.

He passed a much better night than he had done since the commencement of his illness after the incision was made; he also experienced great diminution of pain in consequence; the discharge is considerable, and he has had several attacks of rigors since; bowels open.

5th. Is taking quina with gentian, tincture of cinchona, and dilute sulphuric acid, three times a day; the discharge continues great, but the tumefaction is much diminished, and the pulse is moderate; appetite improving; sleeps well.—Continue the poultice, and apply a bandage above and below the wound.

7th. The discharge is comparatively trifling. Ordered to be dressed with lint, and a bandage with lateral pads so applied as to press on the parietes on the abscess, in order to induce adhesion.

14th. Has continued to improve since the last report; granulations rising healthily.

He remained in the hospital until the 21st, when he became an out-patient; at that time he was nearly well.

MISCELLANEOUS.

During the last quarter, five Surgeons, four Assistant Surgeons, and one Dispenser, have died in the Royal Naval service.

The degree of Doctor of Physic has been conferred on the following gentlemen of Cambridge University:—Richard Elmthirst, of Caius; Disney Llander Thorpe, of Caius; John Harris, of Trinity; and John Pendlebury, of Queen's; and the degree of Bachelor in Physic on John Barrett Nelson, of Trinity.

The Municipal Reform Bill.—The following letter has been forwarded to Lord John Russell by one of the medical gentlemen of Hereford:—"My Lord,—I take the liberty of suggesting to your lordship the propriety of protecting the members of the medical profession against compulsory service in the proposed Town Councils, and I do it on the ground that their professional engagements will prevent their doing justice to the other appointments, unless it be left to their convenience and discretion. Your lordship's kind attention is requested to this suggestion, and

"I have the honour to remain, my lord,
"Very respectfully, your obt. humble servant,
"Hereford, July 9, 1835. P. JAMES."

COLLEGE OF SURGEONS.

Names of Gentlemen who received Diplomas during the month of June, 1835.—Wm. Verrall, Steyning; William A. Anderson, Brompton-row; Samuel Wm. Webb, Devonport; Chas. R. Rowe, Winborne; Wm. J. Hugoe, Falmouth; William Thackwell, Dymock, Gloucester; George H. Fosbrooke, Bedford, Warwick; George Gibson, Ulverstone; Dennis Adams, St. Neot's; Edward C. Jepson, Gainsborough; Wm. Sharples, Islington; George T. George, Bath; William U. Whitney, Bath; John Shelton, London; William Dawson, Sheffield; Lewis D. Whitaker, Bampton, Oxon; Thomas Bradshawe, Huddersfield; Fred. Roberts, Carnarvonshire; Oliver Fowler, Kingham, Oxon; Thomas Holdsworth, Worcester; Robt. Mortimer, Taunton, Devon; Samuel H. Bibley, Islington; Wm. Eddowes, Salop, Bromlow; Thomas Birt, Stroudwater; Henry Walker, Hampstead; Richd. Neckols, Cawthorne, Barnsley; Wm. C. Hinton, Plymouth; James Furlong, Wexford; Samuel Orr, Innoshannon, Cork; George Wood, R.N.; Wm. Duncan, Aberdeen; Henry Elsegood, Upper Brooke-street; Charles Anderton, Stanc, near Manchester; Geo. Malcolm, Fraserburgh; Thos. H. Wheeler, Bandon; Caleb Radford, Buxton; John Shannon, E.I.; John Williams, St. Agnew's, Cornwall; Samuel W. Bowden, Brexham; David M. Cockroft, Emden Bridge, Yorkshire; Thomas J. Webb, Shrewsbury; Chas. Potheary, Nether Wallap, Hunts; William T. Shelden, Cheltenham; Francis F. Pilgrim, Barbadoes; Richard Laslett, Goodneston, Kent; William Gordon, Sutherlandshire; Robert B. Cumming, Chelsea; Brice Blair, Monymore, Derry; William M. Kelby, Tuam; Thomas B. Peacock, Chester; John S. Walton, North Allerton; James French, Glamorganshire; Joseph J. Nicholson, Castle M'Aden, Wicklow; Thomas J. Madden, Loughrea; Jas. J. Sullivan, Tuilslease, Cork; Mathew H. Cory, Kettlestone, Norfolk; George F. Bush, Bath; Wm. St. John Boyle, Longford; Edmond L. Bagshawe, Bath; Wm. Alexander, Aberdeen; Richard S. Penkivil, Yeovil; Edward Clarke, Belturbet; William H. Peacock, Sinnington, Yorkshire; Edward Dakins, Colchester; Matthew Webb, Ketley, Salop; Thos. Laud, Exeter; Robert Young, Nelson square; Walter G. Scott, Margate; William Minchin, Cashel.

APOTHECARIES' HALL.

Names of Gentlemen to whom the Court of Examiners granted Certificates of Qualification, July 2, and July 9, 1835.—Henry Hewson, Exeter; Thomas Cooper, Stourbridge; George Gill, South

Normanton; Simon Murchison, Bath; Henry Crummack, York; Henry Lindsell Sopwith, Brittlewell, Essex; Hamilton Holbeche, Sutton Coldfield.

APPOINTMENTS.

Naval.—Mr. Bankier, of the Melville, to be assistant-surgeon of the Algerine. Dr. A. Gilchrist, to be surgeon, and Mr. L. D. Buchanan, assistant-surgeon to the Pearl. Mr. J. H. Nation, to be assistant-surgeon to the Star packet. Mr. John James Lancaster, assistant surgeon, to be acting-surgeon to the Pluto. Mr. W. F. Carter, assistant-surgeon to the Carron. Mr. John Park, assistant-surgeon to the Jasseur. Mr. A. Brown, assistant-surgeon to the Pandora. Mr. John Moody, assistant-surgeon to the Caledonia. Mr. J. Shaw, assistant-surgeon to the President. Mr. J. Carmichael, to be acting-surgeon of the Rose, vice Jeffrey, invalided. Mr. J. G. Ballantine, assistant-surgeon, from the Victory, to the Winchester.

General.—Mr. Weymouth, surgeon and superintendent of the Charles Kerr emigration ship, under the Australian Commissioners. Mr. Gardner Hill, surgeon to the Lincolnshire County Lunatic Asylum. Dr. James Phillips Kaye, of Manchester, one of the assistant Poor-Law Commissioners.

DEATHS.

Dr. M'Clelland, of Maghera, County of Derry. Mr. James G. Bashford, of Callington, surgeon. Mr. William Staniford, senior surgeon to the Sheffield General Infirmary. Mr. Francis Mattison, of South Hetton, Durham, surgeon. Mr. Robert Bingham, of London, surgeon. Mr. John Tomlinson, surgeon of the Kildare County Militia, and of the Kildare Infirmary. Surgeon W. Jales, Royal Navy. Mr. Edward James, of Uxbridge, Middlesex, surgeon. Dr. Huckblock, of Southminster, Essex. Mr. Maclean, surgeon of the Killibegs, Ardara, and Dunkamely (Donegal Co.), Dispensaries. In Liverpool, Dr. William Anderson, late of Bolton-le-Moors.

WEEKLY BILL OF MORTALITY.

London, Tuesday, July 14, 1835.

Abscess	6	Hernia	1
Age and Debility	29	Hooping-Cough	5
Apoplexy	7	Inflammation	16
Asthma	14	Inflammation of the	
Childbirth	4	Bowels & Stomach	1
Consumption	38	Inflammation of the	
Constipation of the		Brain	1
Bowels	1	Inflammation of the	
Convulsions	26	Lungs and Pleura	7
Croup	3	Insanity	4
Dentition, or Teeth-		Jaundice	2
ing	2	Liver, Diseased	4
Dropsy	13	Measles	7
Dropsy on the Brain	13	Miscarriage	3
Epilepsy	1	Mortification	6
Fever	4	Small Pox	14
Fever, Intermittent		Spasms	3
or Arue	1	Unknown Causes	20
Fever, Scarlet	3		
Heart, Diseased	2	Stillborn	12

Buried, Males 144 Females 136 Total 280
Decrease in Burials reported this week, 95.

CORRESPONDENTS.

Therapeutic's answer to Medicus will appear in our next.

All Communications and Books for Review to be forwarded (free of expense) to the Publisher, 356, Strand, near King's College.

CLINICAL LECTURES

DELIVERED BY

ROBERT J. GRAVES, M. D.,

At Sir Patrick Dun's Hospital, during the Session of 1834-5.

LECTURE XXI.

GENTLEMEN,—I shall refer briefly to some points connected with the case of an old man in the chronic ward, who died lately of inflammation of the lung. At the period of his admission, he had been ill for some time; both sides of the chest, but particularly the left, sounded dull on percussion; he had extensive bronchial respiration and crachét rouille, in fact, it was a very bad case of double pneumonia, a disease which at his time of life is very seldom cured. We did all we could to arrest the progress of the disease; we cupped him over the left side, gave him mercury so as to affect his system, and applied blisters to both sides of the chest, anteriorly and posteriorly. These were the only active measures which remained for us to employ; from the man's age, the weakness of his pulse, and the duration of the disease, we could not venture on general bleeding; we could only attack the disease with local depletion, mercury, and counter-irritation. All these remedies were applied with great diligence, but unfortunately proved incapable of checking the disease. His cough continued, respiration became more difficult, and though his mouth became affected, the dullness on percussion increased day after day; and though the patient was removed into a warmer room, and every attention paid to his comfort, it was evident that he was getting gradually worse. About a fortnight after his admission, his expectoration assumed the purulent character, and it was obvious that the lung had passed from the stage of hepatisation into that of interstitial supuration. He took the decoction of polygala, with Iceland moss and syrup of white poppies, but without any relief to his symptoms; the disease increased, and he

died on the 19th, sixteen days from the date of his admission.

On examining the lung, the ordinary phenomena of pneumonic inflammation were discovered; parts of the lung were in the state of grey hepatisation, other parts were infiltrated with pus, and broke down easily under the finger. We found, too, that he had not only pneumonia, but also extensive pleuritis and pericarditis. The pleurisy had probably commenced about eight or nine days before his death; the pericarditis was of an origin somewhat more recent.

You may ask why I did not recognise these affections before death. The reason is twofold. The man was in a very weak and hopeless condition, and both sides of his chest were sore from the blisters; these are circumstances under which I have strong objections to torment a patient with examinations, and therefore I made none in this case. The other reason is, that in a patient who has been greatly reduced by some acute disease, new inflammations are apt to spring up with great rapidity, and with still greater latency. I remember a very remarkable case of the same description which occurred at the Meath Hospital, where the patient had a very extensive inflammation of the pleura with exudation of lymph and effusion of a considerable quantity of fluid, and yet not one of these symptoms were recognised during life. This man, you will recollect, never complained of pain in the side, nor had he orthopnoea, irregularity of pulse, lividity of countenance, or any of those symptoms which are looked upon as indicative of pericardial inflammation, yet on dissection we find the pleura extensively engaged, lymph exuded on its surface, and a small quantity of sero-purulent effusion in its cavity; and on examining the heart, we find the pericardium covered internally with an extensive gelatinous layer, consisting of lymph and puriform fluid intimately mixed together. You perceive, then, in this case, a confirmation of what I have so often insisted on, that pleuritis may occasionally run through its course, unaccompanied by pain in the side, and that inflammation of the pericardium may exist without orthopnoea,

irregularity of pulse, lividity of countenance, or fainting, symptoms formerly believed to be more or less manifest in every case of pericarditis. The pathology of pericarditis has been investigated but lately with the care it deserves: the labours of our French brethren have been mainly instrumental in producing its present degree of advancement. In England some valuable observations have been contributed by Dr. Elliotson and others, but they have been more than rivalled by the contributions to the diagnosis of this disease, which have appeared in the *Dublin Journal of Medicine and Surgery*. The French, indeed, have afforded the strongest evidence of the high value they attach to the essay of Dr. Stokes on the subject of pericarditis, by the transference of his entire article to the pages of the *Archives Générales de Médecine*. A most masterly paper, by Mr. Mayne, in the 20th number of the *Dublin Journal*, ought to be consulted by every one anxious to make himself master of this important subject. Indeed I have no hesitation in asserting that Mr. Mayne's paper will be found capable of bearing a comparison with anything yet written on the symptoms of pericarditis; compare it, for instance, gentlemen, with the article Pericarditis, by Dr. Hope, in the *Cyclopædia of Practical Medicine*, and you will at once perceive the very great inferiority of the latter; compare it and Dr. Stokes's paper with the reports of clinical lectures delivered in London on cases of pericarditis, and you will agree with me in thinking that the writings of our countrymen yield not in merit to those of the metropolitan professors. Gentlemen, I speak not in the spirit of vanity; I do not bring these matters forward in order to flatter and augment a feeling of medical nationality; far be it from me to extol beyond their deserts the merits of Irish writers, still farther from me the wish to depreciate the labours of English authors. Let us emulate our neighbours in the spirit of honest rivalry, and not imitate the example of some London lecturers and Scotch reviewers, who—but I have done, fearing that the narrow-minded prejudices of an editor in Edinburgh, or of a few teachers in London, should induce me to forget the favourable, the too flattering reception, which every thing of merit issuing from the press of Ireland has met with from the medical periodicals of England.

To return to our subject. Pericarditis is a disease of quite as frequent occurrence as pleurisy, and often, as in the present instance, associated with the latter; on the whole, I do not consider pericarditis as more dangerous or more difficult to cure than pleuritic inflammation, neither does its existence seem less easily ascertained. Some cases, it is true, are extremely insidious in their nature, but the same may be said of cerebritis, pneumonia, and all other phlegmasiæ; usually, however, a careful and attentive physician will at once detect the existence of pericardial inflamma-

tion. When he finds that a patient has been exposed to causes capable of exciting fever, that he has been liable to gout or rheumatism, or has been actually attacked with either, then will his attention be directed to the heart; if he perceives that its action is either unusually violent or irregular, or if he observes that uneasiness and oppression of chest are complained of to a degree not to be accounted for by any pulmonary lesions present; if he finds that his patient has the appearance of a person labouring under some serious disease, and that none such exists in the lungs themselves, then will he be called on to examine the region of the heart with the greatest accuracy. One of the most common symptoms of pericarditis is tenderness in the intercostal spaces over or near the heart. This is not perceived in many cases until pressure is made with the fingers. Tenderness occurs in many who do not complain of pain or stitch in this portion of the chest; when the latter co-exists with tenderness, the presumption in favour of the presence of pericarditis is still greater. The pain and uneasiness about the heart, are, as Dr. Elliotson remarks, generally increased by pressing in the left hypochondrium upwards towards the diaphragm. I must refer you to Dr. Stokes's and Mr. Mayne's papers for any analysis of the physical signs derived from percussion and auscultation, and also for an explanation of the reasons why the general symptoms are subject to such striking variations in this disease. In some you have, soon after its commencement, lividity, orthopnoea, and tendency to fainting, combined with irregularity of pulse; in others the disease runs its whole course, whether it terminates fatally or in health, without any of these symptoms; in fact, no disease is more inconstant in its characters, and none more requires the aid of investigation by means of physical signs, which, if well conducted, seldom fails to clear up all doubts. Of one thing I am certain, that inflammation of the pericardium in a person of tolerably good constitution may be generally arrested in its progress by bleeding, frequent leeching, and scruple doses of calomel. It is mere trifling on such occasions to have recourse to tartar emetic, digitalis, or the common antiphlogistic remedies. Instantly use every effort to produce the full action of mercury on the system. Apply the ointment to the axillæ; smear it over the inside of the thighs; make your patient respire the vapour of *hydrargyrum cum creta* as often in the day as he can bear the process, and be assured that you are pursuing the proper course. Well has it been observed by Dr. Elliotson, when speaking of a fatal case of pericarditis,—“The only chance I had to save the life of this person would have been to have pushed the mercury further. I am quite sure that more lives are saved in inflammatory diseases by carrying mercury to a great extent, than by merely having recourse to it for the simple production of ptyalism.”

It is to the want of decision in the practice of the French physicians—it is to their want of confidence in mercury, that we must attribute the greater mortality of pericarditis in Paris than in Dublin, for most of our patients recover, most of theirs die. Of course, gentlemen, the most unfavourable of all cases is where pericarditis attacks a person debilitated by previous sickness, such as fever, dropsy, &c. Here the disease runs a very rapid, and too often a fatal, course, and cannot be controlled. One practical remark, and I have done. Before effusion takes place into the pericardial sac never apply a blister; after it has occurred, repeated and severe blistering over and about the region of the heart is one of our best remedies.

Two years ago I had an opportunity of studying a case which subsequently proved to be an example of inflammation of the muscular substance of the ventricles, ending in suppuration and the formation of a large abscess in the ventricular parietes. This is a very rare occurrence, for the simple reason, that inflammation of the substance of the heart generally proves fatal before pus is formed. A very robust gentleman, aged 55, from the neighbourhood of Wicklow, came to Dublin for the benefit of advice. He had complained of cough for many months, together with dyspnoea and palpitation of the heart; latterly he had become anasarcaous, and suffered much from distress and pain referred to the region of the heart. This pain formed the chief subject of his complaint, and darted over the chest. On examination, I immediately detected hypertrophy and dilatation of both ventricles, and I announced the existence of valvular disease, inasmuch as a loud and extensive *bruit de soufflet* existed, together with a remarkable *frémissement cataire*, and a very irregular pulse. This opinion was delivered in the presence of Dr. Sherwood and Mr. Hetherington. Our patient returned to the country, where he continued to complain of pain in the heart that was at times excruciating. He died suddenly at the end of a few weeks. The results of the post-mortem examination were kindly communicated to me by Dr. Sherwood. Considerable dropsical effusion into both pleural cavities; heart exceedingly enlarged. "On slitting open the pericardium, I found (says Dr. Sherwood) that the heart adhered to its entire surface by means of bands of coagulable lymph, which were easily broken down except at the apex of the heart, where they were very strong and firm. In attempting to break them, more than two ounces of purulent matter escaped into the cavity of the pericardium, which caused me to institute a very close examination of the parts in order to discover whence the pus came. I found a small rent in the apex of the heart immediately below the floor of the left ventricle, exactly in the situation of the firm adhesions before spoken of. On enlarging this opening I discovered a cavity in the substance of the

heart with a regularly-defined wall, capable of containing more than two ounces of fluid. The walls of both ventricles were enormously thickened; all the valves were more or less affected; but the chief disease lay in the semi-lunar valves of the aorta, which were nearly altogether ossified."

This case, gentlemen, was extremely remarkable, and exhibits an example not merely of the dropsy and dyspnoea which so usually attend hypertrophy and valvular disease of the heart, but also of a combination of chronic pericarditis and chronic inflammation of the muscular substance of the ventricles, *ending in the very rare termination, abscess.*

Having made these observations, I shall next call your attention to the disease of Francis Thorpe, which is important both in itself and from the circumstance of such cases being frequently met with. This lad, who was much exposed to the weather, being an outside servant, was attacked about six months ago with cold, followed by hoarseness and sore-throat, with cough, then slight, but at present rather troublesome. A certain degree of rawness about the fauces was observed soon after the attack, and latterly the submaxillary glands have become slightly enlarged. On looking into the throat, the *v-lum* and fauces appear redder than natural, the amygdalæ are swollen, and the mucous membrane covering the back and sides of the pharynx is dry and covered with irregular superficial excoriations. The hoarseness still continues, and he can only speak in whispers. His general health, however, does not seem in any degree impaired; he has no fever, his appetite is good, and his sleep natural.

This case, however, is one which demands particular attention. A boy is attacked with cold, he gets slight local inflammation of the fauces and larynx; this produces cough and hoarseness, which go on for months rather increasing than diminishing, and his symptoms finally assume a chronic and intractable character. Still he does not fall away in flesh, has no symptom of hectic, and, on examining his chest, you cannot find any evidence of the existence of tubercles. In making the prognosis in such a case, you should always act with great caution. Though an examination of the chest should detect no distinct sign of tubercles, and a review of the state of the constitution should satisfy you that there was no fever, night sweats, or wasting of flesh, yet the obstinacy and persistence of the inflammatory condition of the larynx and fauces would seem to show that the affection, though not decidedly of the scrofulous character, was still very analogous to it, and might end in phthisis. You should not be so sanguine as to anticipate a certain cure, because the cough and laryngeal symptoms are unaccompanied by fever, or by stethoscopic phenomena indicating the approach of phthisis. The disease, by fixing itself in the larynx and keeping up a constant irritation in the neighbourhood of the lungs,

would probably, after some time (if exacerbated by fresh colds, and confirmed by neglect), give rise to tubercular development.

Allow me to allude here briefly to a form of chronic laryngeal inflammation which has been described under the name of phthisis laryngea. Of this disease there are two varieties. In one case the hoarseness and sore throat follow the development of tubercles in the lung, in the other they precede it. Consumptive persons very frequently get, shortly after the occurrence of scrofulous inflammation of the lungs, sore throat, hoarseness, and laryngeal cough. But this is different from the hoarseness and cough which precede phthisis. In the former the laryngeal symptoms are secondary, and form only a part of the general disease; in the latter, they constitute the first link in the chain of morbid action. The former take place only in a constitution decidedly scrofulous, the latter occur most commonly in constitutions which have been impaired by various debilitating causes, and thereby rendered analogous to, or identical with, the scrofulous. One disease, however, explains the other, for it is clear that if a certain state of the constitution is capable of occasioning scrofulous inflammation of the lungs and tubercular development in the pulmonary tissue in the first instance, and laryngeal disease in the second, it is clear, I say, that the order of succession may be very easily inverted, and that in such a constitution the accidental circumstance of a cold falling on the larynx may determine the appearance of disease in that part long before the lungs become engaged. Hence, whenever you are called on to treat a case of chronic laryngitis, where the disease has lasted for any length of time, and where the patient's system has been impaired by any debilitating cause, or where you have any reason to suspect that he is of a strumous diathesis, your prognosis should be always guarded.

You should not however give up the case at once, particularly if an examination of the chest assures you that there is no scrofulous deposition going on in the lung. In the first place, endeavour to remove the inflammation of the throat if possible; by doing this you will accomplish a vast deal; and in the next you should direct all your efforts towards improving the state of the constitution, for in this way you make the greatest progress in checking the tendency of the individual to scrofula. If there be much tenderness of the larynx on pressure, as you can easily ascertain by placing your finger and thumb on each side of the thyroid cartilage, pressing the larynx backwards, and moving it from side to side, you should commence with the local detraction of blood. A small number of leeches should be applied to the throat every second or third night, and this should be continued for a week or a fortnight. If there be no tenderness of any amount, and the patient can bear pressure freely, there is no necessity

of applying leeches. Your means must then be confined to those remedies which act immediately on the diseased mucous surface, and for this purpose, one of the best applications is a solution of nitrate of silver, ten grains to the ounce, or a solution of the sulphate of copper, in the same proportions. The best mode of applying it is to take a probang, or a small piece of sponge, fastened to the end of a quill, dip it in the solution, and having slightly squeezed it to prevent the fluid from dropping, touch the excoriated and red parts of the fauces as far as you can conveniently go, rather by pressing the sponge gently against the inflamed mucous membrane than by rubbing. It will be essentially necessary to touch every portion of the diseased surface of the pharynx, for if any part be omitted, it will have the effect of keeping up the disease. You perceive the object here is to change the action of the mucous membrane. By acting powerfully in this way on the mucous membrane covering the pharynx, fauces, and entrance of the larynx, you will often succeed in bringing on a healthy action, which spreads to the parts in the vicinity. Of this we have an illustration afforded by the results of treatment in chronic disease of the skin, where local applications to a particular part not only cure that part, but also extend their influence to a considerable distance on every side. It is the same with respect to irritation or inflammation of the lower part of the digestive tube; the use of astringent injections, which can only affect the lower part of the rectum, is often found of essential service in relieving dysenteric affections of the colon.

In addition to the use of the nitrate of silver, we have employed a remedy in this boy's case which has been found beneficial in several instances, where no sign of pulmonary irritation is present—I allude to the use of iodine inhalations. This was also intended to make a still further change in the condition of the diseased mucous membrane. It is made by putting from five to ten drops of the tincture of iodine, with half a drachm of tincture of conium, and four ounces of hot water, into an inhaler, and making the patient draw the vapour into his throat for about ten minutes, every night and morning. This form of inhalation proved extremely serviceable in the case of a gentleman who has attended my lectures this winter. About the commencement of November, while in a delicate state of health, he was attacked with cold, and got sore throat, followed by slight huskiness of voice, and hard, incessant, laryngeal cough. These symptoms continued during December and the greater part of January, and were not completely removed until the beginning of February. He had considerable rawness of the back and sides of the fauces and larynx; we observed that the mucous membrane of those parts had a strong tendency to become excoriated, for whenever an exacerbation of his symptoms occurred, and that his cough in the morning was harder than usual,

small portions of the detached pellicles of lymph exuded by the mucous membrane came away at each fit of coughing, and his sputa were tinged with blood. There was another symptom in this case, which you will very frequently meet with in similar instances, namely, a remarkable feeling of chilliness in the integuments of the fore part of the neck and external fauces. This he was in the habit of remarking, and could always foretell the occurrence of an exacerbation of his laryngeal symptoms, by the increased feeling of cold in the cutaneous surface over the diseased parts. In this case a great deal of good was effected by the inhalation of iodine with conium. The mode in which this gentleman employed it was by dissolving from six to nine grains of the extract of conium in hot water, and then adding the tincture of iodine. Instead of the common inhaler, which contains but a small quantity of fluid, and in which the inhalation becomes cold in a very short time, he employed for the purpose a high old fashioned teapot, which contained a large quantity of fluid, and could be used for a much longer period. Under the use of this, with counter-irritation and the internal use of iodine with sarsaparilla, the laryngitis disappeared; it returned, however, about a month afterwards on fresh exposure, but was speedily removed by the use of the nitrate of silver solution.

Another thing which we have prescribed for this boy, and which proves an excellent adjunct in the treatment of such cases, is counter-irritation by croton oil frictions. To an ounce of compound camphor liniment, we add twenty or thirty drops of croton oil, and of this lotion about one or two drachms are to be rubbed over the parts night and morning until the eruption appears. Two rubbings are generally sufficient to produce a copious eruption of papule about the size of a pin's head, and having exactly the appearance of a disease at present very rare, the eczema mercuriale.

We have not, however, been able to effect any remarkable improvement in this boy's symptoms by the means to which I have just now alluded, and the question is, what other remedies have we left, from which we could hope to derive any advantage? The boy has no fever or emaciation, his appetite is good, his sleep regular, and the stethoscope informs us that there are no symptoms of tubercular development; we are therefore, I think, authorised in attempting to arrest the disease by the only means of which we have a choice under such circumstances. It is my intention to attempt its removal by mercury, and I have therefore ordered him to take, three times a day, half a grain of calomel, three grains of blue pill, with a grain of the extract of conium; and instead of iodine, we have directed him to inhale the vapour of hydrargyrum cum creta twice or three times daily. If, however, we find that this does not produce speedy improvement of his symptoms, we shall stop it immediately, as the use of mercury in such cases is

generally a perilous experiment. I shall also take care to pay attention to the general state of his health, as this is a matter of great importance in cases of chronic disease. I had almost forgotten to observe, that in such cases the use of the decoction of sarsaparilla with nitric acid has been found extremely beneficial. There is one point in the treatment of chronic laryngitis which you should never forget, and that is, to make the patients refrain as much as possible from speaking. Unless they do this you will find it very difficult to effect a cure. A person with an inflamed larynx, who exercises his voice as usual, acts as foolishly as a man who reads with inflamed eyes, or walks with a sprained ankle. The only thing I have to add with respect to the treatment of this disease is, that the patient should be kept as much as possible in an equal temperature, and hence it will be necessary in many instances to confine him to the house, or at least to prevent him from exposing himself to a cold and damp atmosphere. When he recovers he should use cold gargles and cold lotion to the throat in order to render the parts less susceptible of cold.

Allow me now to direct your attention to two cases of *prurigo* which have been recently admitted. The first is that of Jane Cassady, a woman advanced in life, but of tolerably good constitution considering her age, station, and circumstances. About three months before admission, a rash appeared over her arms, legs, and body, which was preceded and accompanied by pain of the stomach, head, and limbs, with recurring rigors. As far as we can learn from her description, this appears to have been urticaria; of this, however, we cannot by any means be certain, and besides it is of little consequence, as *prurigo* may come on without it. She is at present labouring under *prurigo senilis*, not thickly disseminated, but still a source of constant annoyance to her from the intolerable itching it produces. Several of the papule have formed dark red crusts, but this is in consequence of their bleeding from being scratched.

This affection has been so well described by writers on cutaneous diseases, and is so easily recognised, that I shall not take up your time in detailing its characters; a few circumstances connected with treatment, however, should be mentioned as deserving your notice. In the first place, I may observe that *prurigo* is a most harassing complaint, and if not checked, has a tendency to undermine the constitution by disturbing the patient's rest. The warmth of the bedclothes, by increasing the vascularity of the skin, occasions an aggravation of the symptoms; the patient passes a miserable and restless night, and rises in the morning quite unrefreshed. This in process of time gives rise to a kind of febrile condition of the system, the mouth and fauces become dry, the appetite is impaired, the secretions deranged, and debility and emaciation gradually produced. It is a disease which has broken many

a constitution, which previous to its accession was to all appearance unimpaired and healthy.

Prurigo has been confounded with common itch, but if you examine the parts it occupies, you will easily distinguish them. It is most likely to be confounded with the small vesicular itch, where the vesicular papulæ (this is the most expressive term I can think of) are extremely minute. There is a papular itch, and there is also one which is intermediate between the vesicular and the papular; it is with the latter that prurigo is most apt to be confounded. The difference between them, however, may be recognised by observing the parts of the body on which they appear. Itch generally attacks the extremities, and particularly the inside of the joints, and the spaces between the fingers. Prurigo, however, does not occupy the same situations. If you examine this woman, you will not be able to find any trace of the eruption about the joints or between the fingers, and this circumstance is of itself sufficient to make the distinction, for it would not have lasted for three months without attacking these parts. I may also observe that prurigo senilis is generally accompanied by derangement of some of the important secretions of the body, but particularly of the urine. Its appearance is in many instances preceded by a scanty flow of urine, and it is frequently accompanied by the deposition of a copious whitish sediment, which is the lithate of ammonia. This observation is worthy of attention, because it furnishes us with a hint towards the treatment of which we may sometimes avail ourselves with great benefit to the patient. You will in such cases often effect a great deal by the use of diuretic medicines, as cream of tartar with decoction of juniper berries and squill, or with the more stimulant diuretics, as turpentine and cantharides. It will be also good to vary these remedies according to the circumstances of the case, and they should be always given in combination with medicines calculated to act beneficially on the digestive organs. In this case, we have given decoction of sarsaparilla with nitric acid for the last two days; before this we gave cream of tartar with powdered bark. These are some of the best medicines which can be used internally in the treatment of prurigo senilis. It is, however, a very obstinate disease, and you will be often obliged to try many internal and external remedies before you can hit on one that will prove serviceable. Cooling diuretic aperients, aperients combined with tonics, and the decoction of sarsaparilla with nitric acid, these are the chief internal remedies. As to external ones, they are extremely numerous. In the present case we have, in the first place, directed the patient's body to be washed with a lather of soap and warm water every night and morning. The water for this purpose should be used as hot as the patient can bear it, and a very soft brush or sponge should be employed. In prurigo a vast deal of good has been done by merely washing the itchy parts

with soap and warm water; how it acts I cannot say, but I have seen a great deal of advantage derived from a long continued perseverance in its use. After this you may have recourse to more powerful applications, such, for instance, as sponging the parts at bed-time with hot whiskey and laudanum, a pint of the former to a drachm of the latter. Here you have the stimulant effect of the whiskey, the narcotic of the laudanum, and the peculiar action of heat on the skin, all combined, and calculated, therefore, to make a very decided impression. How this effect of heat is produced I cannot tell, but we all know that, whether applied in a moist or dry form, it exercises a powerful influence over the vascularity and nervous vitality of the skin. Neither can I tell you what description of cases are most likely to benefit by it; some cases of prurigo senilis are much relieved by warm applications, others are not; you should, however, always make a trial.

There was one application used in this woman's case to which I shall briefly call your attention. A drachm of acetate of lead was dissolved in two ounces of wine vinegar mixed with the same quantity of water, and this was rubbed up with olive oil so as to form a liniment. Mr. Nalty, who mixed up the ingredients, says that three ounces of olive oil were absorbed. You are aware that oil conducts itself with respect to the metallic oxides as it does with the alkalies. This formed a liniment which when allowed to stand separates; but its ingredients are at once mixable by shaking the bottle. From its use the woman has derived great relief, and I can recommend it to you as one of the best applications in prurigo.

Before I conclude this lecture, I shall allude briefly to the very interesting case of Sarah O'Neil. This young woman was admitted on the 17th of February, having been attacked on the 10th with fever of the ordinary type. On the day after her admission, she complained of want of sleep, and pain of the forehead and temples, but she had no raving, tinnitus aurium, intolerance of light, or other symptoms of inflammation of the brain. She had been confined about a fortnight before she came in, and complained that her breasts were very troublesome to her. Her belly was soft and fallen, quite free from tenderness or soreness, and she stated that her bowels were free. Her tongue was furred, her pulse 130, the lochia suppressed for the last two days. Things went on tolerably well for four or five days, when her belly became tympanitic, and she began to complain of pain on pressure. The action of the heart now became more violent; her pulse rose to 140, and blood began to appear in her stools. On the 24th of February, that is to say, about the 14th day of her illness, her pulse was 150, she passed a large quantity of blood from the bowels, and the tympanitis subsided.

In cases of fever accompanied by tympanitis

and signs of intestinal congestion, hæmorrhage from the bowels, particularly when it occurs on one of the critical days, should not be interfered with. It is in this way that nature very frequently brings about relief of the congestion and irritation of the gastro-intestinal mucous membrane, just as she relieves congestion of the head by bleeding from the nose. In the case of a lady whom I attended along with Mr. Palmer some time ago at Drumcondra, the occurrence of intestinal hæmorrhage was followed by the most marked effects; her belly became soft, the tympanitis disappeared, and all her febrile symptoms were speedily removed. The appearance of blood, therefore, at such periods, and under such circumstances, is to be looked on as a favourable occurrence, nor should it be interfered with in any way, until from its continuance or its quantity it appears likely to produce debilitating effects. In the present case, however, this hæmorrhage will require to be very carefully watched. The woman's system is in that state which is favourable to profuse fluxes of blood, for it is not long since her accouchement, and she has had suppression of the lochia. She has had but little fever for the last two or three days, but the action of the heart still continues extremely violent, and her pulse is still rising. Respiration too has been considerably accelerated, and where this occurs, you have always reason to apprehend danger. I have accordingly endeavoured to moderate the hæmorrhage by the use of acetate of lead and opium. A draught composed of two grains of acetate of lead, eight minims of tincture of opium, and fifteen minims of wine vinegar in six drachms of water, has been prescribed to be taken as occasion requires. A large blister has been applied, so as to cover the epigastrium and sternum, and she has been allowed port wine and chicken broth. Where a patient, debilitated by previous fever, has been attacked with hæmorrhage, you should be careful in supporting the system by small quantities of wine, and light nutritious food, for there is always more or less danger to be apprehended of a sinking of the powers of life. In cases of this kind the cautious use of acetate of lead with opium and wine are the only means on which we can rely with any confidence.

I regret, gentlemen, that time will not permit me to make any further observations on this very interesting case; I shall, however, resume its consideration at our next meeting.

DEATH OF M. POLYDORE BOULLAY.

This talented young chemist has died recently at Paris, after a very long illness, resulting from an accident, which happened so far back as November, 1830, when he was severely burnt by the breaking a bottle of ether near a fire. He had distinguished himself in the scientific world by several essays, which showed strong indications of skill and industry.

CLINICAL OBSERVATIONS ON THE MORE INTERESTING CASES ATTENDED AT THE HOSPITAL OF SURGERY AND OPHTHALMOLOGY, FOR THE YEAR 1833.

BY PROFESSOR GRAEFE, OF BERLIN.

[DURING the year 1833, 1524 patients were treated either by Graefe or his pupils: of these, 1046 were surgical cases, 478 were affections of the eyes; 1217 were cured; 22 died: 455 operations were performed, of which 80 were for diseases of the eye.]

Artificial Pupil.—This operation has been performed in five cases, and in each on one eye only. Two of the patients were quite blind: they could not distinguish light from darkness; and as, therefore, there was reason to dread palsy of the retina, the operation was done only at their earnest request. It succeeded so far as to allow the rays of light to pass through the pupil, but vision was not restored.

In such a case we must not be too determined in refusing an operation, because experience has clearly demonstrated that, although there may be an absolute privation of light, yet, in some cases, the operation for the formation of an artificial pupil has succeeded in restoring vision. It may happen that the iris may be so thickened at its posterior surface only, from inflammation, with effusion of lymph, and it may have acquired such a density, that the finest rays of light cannot penetrate to the retina. It is very difficult always before an operation to distinguish between these cases, and those attended with real amaurosis. The three other patients were completely cured by the operation of *corectodialis*.

Excision of the globe of the eye, and of the two eyelids.—This operation was performed for the removal of a fungous degeneration of the globe of the eye, and of the eyelids, extending to the bottom of the orbit, and consequent on an old neglected trichiasis. It proved successful, and the patient was cured in four weeks. Although the lachrymal gland was allowed to remain, not the slightest trace of the secretion of tears was perceived: a fact which is rather interesting in a physiological point of view.

Guthrie's Ung. Arg. Nitrat.—*Pommade Ophthalmique de Guthrie.*—This ointment, which enjoys a great reputation in England, has been employed with advantage in cases of idiopathic and chronic ophthalmia, especially in strumous subjects, attended with tumefaction of the conjunctiva of the palpebræ, and in inflammation of the conjunctiva with pannus and thickening of the cornea. It has also been used successfully in obstinate blennorrhœa of the urethra, without causing much pain. It is applied by anointing spiral wax

bougies, which are to be introduced into the canal.

Rhino-plastic Operation.—This operation has been performed, modified according to the Italian method, on a young woman 21 years old, whose nose had been destroyed as far as the bridge by a syphilitic ulcer. The integument was obtained from the arm, and fixed to the circumference of the nasal openings by fourteen points of suture. Union by the first intention took place perfectly only on the right side: on the left there was a little suppuration at the lower points of suture. Some of the threads were removed on the fourth day: the whole were detached by the 7th. On the 11th, the piece of skin by which the new nose was held in contact with the arm was divided. The septum was formed in the fifth week, and within three months the patient returned home with a very good nose.

Extirpation of an enormous polypus from the fauces.—The patient whose case I shall now allude to had two polypi, one which had formed in one of the nares, the other filling up the whole of the cavity of the fauces. The velum palati was depressed and pushed forwards; the polypus was resting on its posterior and superior surface, and descended about half an inch below its free margin: it ascended so high that it was impossible to discover its extremity, and it adhered to the mucous membrane of the pharynx by so large a base that it was scarcely possible to pass an instrument a quarter of an inch between it and its posterior margin.

The nasal polypus, which was about the size of a prune, was readily removed by laceration.

Some time after, the extirpation of the other was effected in the following manner:—In the first place a double thread, an ell long, was passed round that part of the tumour which projected below the velum palati, the ends of which, tied together, were then thrown over the ear: then a piece of thread, nearly two yards long, made into a loop, was passed through the left nostril, with the assistance of Bellocq's sound, and pushed as deeply as possible into the fauces. The loop, which was then placed between the velum palati and the anterior surface of the polypus, was now drawn forwards, and another thread was then tied to the middle of it, in order to enable me to draw it towards me, in case, during the efforts which I must necessarily employ, it should pass up into the nose, to avoid being obliged to have recourse to Bellocq's sound. The greatest difficulty now occurred: it was in passing the loop of the ligature below the tumour. It was attempted to separate the threads of the loop to the right and left, and then carry them beneath and behind, by means of two branches, but this manœuvre was necessarily abandoned, after many fruitless essays.

I then had recourse to the two index fingers, one of which was carried to either side of the

loop, the ends of which were gradually and slowly made tense through the nares. While this was going on, the patient having his mouth wide open, and his head thrown back, I endeavoured, not without using great violence, and causing considerable irritation of the pharynx, to convey the loop, the threads of which were kept apart, behind and below the tumour; and at last I succeeded, having its whole circumference surrounded by the thread. While these attempts were being made, the polypus was drawn forwards and upwards by means of the thread previously passed round its anterior portion. The ligature was drawn tight, and every day more so. The polypus separated on the third day, and was drawn out of the mouth by the thread which had been fixed to its anterior portion: this is a very necessary precaution, for it prevents the tumour, when it separates, from falling into the throat; should it do so, it may, by obstructing the glottis, suffocate the patient, an accident which happened to Professor Meckel of Halle.

The tumour, when extracted, although much diminished by suppuration, was three inches long, one inch and eleven lines wide, and seven and a half inches in circumference. The patient got perfectly well, and has not experienced any relapse.

Sequestrum of the right half of the inferior maxillary bone with its condyle.—Necrosis of the coronoid process of the inferior maxillary bone is not unfrequently met with, especially in children, consequent on obstinate salivation, caused by the abuse of calomel, given during an attack of scarlatina. Doubtless the saturation of the system by mercury has something to do with this death of the bone; but why does not this happen in other cases of pytalism, produced by the abuse of mercury when scarlatina has not been present? It is probable that the virus, or principle of this exanthematous disease, has considerable influence in its production. For this reason, perhaps, the disease is seldom cured by anti-mercurial preparations: it almost always appears with symptoms indicative of a scorbutic diathesis. The most useful remedy to combat its effects, is the internal administration of nitric acid.

A young girl, about ten years old, suffered from scarlatina about three years ago, for which mercury was administered. As a consequence she laboured under obstinate salivation, which was succeeded by pain experienced in the lower jaw, and by fœtid ulcers of the mouth. All the teeth of the left side of the jaw fell out, the coronoid process became denuded, and the soft parts of the affected side were covered with fœtid and sanious ulcers. She was ordered a drachm of nitric acid, mixed with a quart of decoction of malt, to be taken internally; to use alternately gargles of the chloride of lime, and tincture of myrrh, and also malt baths.

When such a case occurs in an adult,

double or treble the quantity of acid may be used, properly diluted.

The bone was removed in splinters, whenever a piece became loose. In this manner half the body of the inferior maxillary bone, with the coronoid process, was taken away, without any fresh points of necrosis showing themselves in any other part of the bone. Some months afterwards, the angle of the jaw became detached, and was extracted, together with the condyle, the form of which was in no way changed. As these necrosed portions of bone were eliminated, they were reproduced by the soft parts, exactly as it occurs in cases of resection of the jaw. A cartilaginous tissue occupied the place of the lost bone, which gradually assumed a hard and compact consistence, so that the patient will finally completely recover the motions and use of the lower jaw. I am not certain whether the teeth have been reproduced in this case, as it has occasionally happened in others where the lower jaw has been regenerated.

Extirpation of bronchocele.—A young man, two and twenty years old, had a tumour about the size of a goose's egg, situated on the anterior and middle part of the neck, which was the cause of great difficulty in respiration and deglutition. These symptoms bore so little relation with the size of the bronchocele, that they could only be attributed to a very close adhesion of the tumour to the anterior surface of the larynx, and even of the trachea, by which their motions were impeded. This, therefore, would be a circumstance worthy attention in the operation.

An incision was made in the skin, about a finger's breadth above the superior margin of the thyroid cartilage, and was carried along the median line of the neck to the upper margin of the sternum. The platysma myoides and sterno-cleido-mastoideus were then turned back to right and left, when the tumour was brought into view. The neighbouring parts were then separated by the fingers, or a blunt instrument, and sometimes by the bistoury: some arteries were tied. When the tumour was quite exposed, it was perceived to be closely adherent to the larynx and trachea, without even the slightest layer of cellular tissue intervening: its removal, therefore, was effected with the greatest care, and by small and repeated incisions. While using the knife, it was a matter of necessity to recal to my recollection the shape of the air-passages, in order not to injure them. The layer of the disease immediately in contact with the larynx, &c., was not removed.

During the whole of this operation, only eight arteries required the ligature; the wound was dressed with dry lint, and no attempts at union by the first intention were made, because I was desirous of obtaining the removal of that portion of the bronchocele, which remained attached to the larynx, by suppuration, and this, in fact, took place; then the lips of the wound were brought to-

gether, and the patient was completely cured at the expiration of six weeks.

A young woman, twenty-five years old, and very delicate, had a goitre from infancy, which was divided into three very distinct lobes. The enormous development of this tumour prevented its entire ablation at once. The middle lobule was therefore first removed, as being the largest, and appearing to be the principal seat, the focus, as it were, of the disease.

The operation was performed, as in the preceding case, with this difference, that the tumour being attached to the larynx and trachea only by a very loose cellular tissue, it could be readily detached without leaving any portion behind. The lips of the wound were brought together by strips of adhesive plaster, and cicatrisation was complete in six weeks.

It is rather remarkable that the lateral lobules which were left, not only did not enlarge, as we had reason to dread, but even diminished considerably, so that the opinion that the central lobule was the real seat of the disease was thus confirmed. Perhaps, however, the inflammation resulting from the operation, and the obliteration of a great number of vessels which were necessarily tied, contributed to cause the absorption of these lobules.

Ligature of the brachial artery at the bend of the elbow.—Under certain circumstances, Hunter's plan of operating, although exceedingly advantageous, requires to be modified, as was exemplified in a case where the brachial artery was opened in bleeding. The patient did not show it until three days after the accident; the arm was then swollen, tense, of a livid red colour, and very painful on pressure. Here the artery, in the usual place of applying a ligature, would present almost insurmountable difficulties, in consequence of the inflammatory tumefaction, which had given rise to a sort of adhesion and confusion among the tissues, as well as in consequence of the absence of pulsation. I therefore preferred the operation at the bend of the arm, because there the jet of blood would serve as a guide to conduct me to the wounded vessel, on which I placed a ligature above and below the wound. The patient left the hospital cured in four weeks.

Anastomosing aneurism of the fore-arm.—A man, about thirty years of age, had from his second year a tumour on the left hand, the slightest scratch on which would cause severe hæmorrhage. The hand was swollen from the tips of the fingers, and presented well-marked pulsations in the more elevated parts; these were more evident on the back of the hand; in the palm, a peculiar rushing sound could be distinctly heard; along the whole length of the fore-arm as far as the elbow, especially on its anterior surface, there were under the integuments irregularly distributed, elastic and pulsating cords, which

gave a very curious appearance to the part; the skin of the diseased extremity was of a darker colour, and even bluish in some places; the whole fore-arm was tumefied, but not painful; the patient could not use it, and he carried it in a sling. Compression of the brachial artery caused the swelling to diminish, and removed the pulsations, especially on the back of the hand. Astringent applications and the use of a roller had been in vain tried; the disease continued to gain ground, I therefore tied the brachial artery at the internal edge of the biceps, and all these symptoms were removed; the temperature of the limb returned on the fourth day, and the patient did not experience anything more than a sensation of itching, which was removed by the application of cold water. The ligature separated on the ninth day; cicatrisation was completed by the sixteenth, and the patient went out cured.

Reproduction of the body of the tibia.—A boy about twelve years old had suffered since his fourth year from numerous ulcers and fistulæ situated on the right tibia. He presented indications of the strumous habit of body, was much wasted, and laboured under hectic fever. Amputation was at first considered necessary, but, on examining the fistulous canals more carefully, it was found that the probe, after traversing the tumefied soft parts, penetrated for some lines through a cartilaginous mass, and then struck against a hard solid body, which appeared to be moveable in some situations; I was therefore of opinion that a sequestrum had formed there, enclosed at least in front and on each side, in a sort of cartilaginous sheath of a certain thickness, having openings communicating with the fistulæ in the skin, and giving issue to the pus secreted by the internal structures. The intention of amputating was abandoned, and the sequestrum, which extended from one articular extremity of the tibia to the other, and thus included nearly all the body of the bone, was extracted. To effect this object, an incision was made in the skin from a fistulous opening in the ham, and carried down to the malleolus, taking care to include in it as many of the fistulæ and ulcers as possible; a second longitudinal incision was then made in the same direction as the first, along the cartilaginous sheath, which was about three lines thick; all the openings which were not too far apart from the line of the incision were comprised in it. The bone could then be felt loose in the greater part of the extent of the wound; it adhered only at its lower end, and its resection was made by means of the chain saw.

The sequestrum, when extracted, presented for the most part a cylindrical shape; it was about four inches long, and nearly an inch thick in its middle; its thinner ends terminated in a serrated manner. Compared with the general size of the child, it seemed to be formed by the whole of the body of the tibia.

The necrosed bone has been placed in the museum of anatomy.

Soon after the portion of diseased bone had been removed, the lips of the incision in the cartilaginous tissue contracted in a remarkable manner. The other part of the wound was filled with pledgets of lint, in order to allow time for any pieces of bone which remained behind to be eliminated. Light splints were applied around the limb, and compression was exerted, but so gently as not to give pain; this was done in order that the cylinder of cartilage might not assume a bad direction. The foot was placed in a proper position. In a short time the pus improved in quality; those fistulous openings which had not been included in the incisions, closed spontaneously; some splinters of bone became detached, and were removed; the wound contracted daily; the fever ceased; strength returned; and it became evident that the cartilaginous sheath was undergoing the process of ossification. At the end of three months the patient was completely cured, and left the hospital having the full use of his limb.

Hæmatoid and medullary fungus.—Authors have of late gone too far in asserting that the heteroplastic tissues are always the results of general specific causes, of universal derangement of the humours. The two following cases may serve to combat the exaggerations in this opinion of modern pathologists.

A child about two years old, without any assignable cause, had an indolent tumour formed in the scrotum, which it filled up entirely, ascending as high as the inguinal ring. This tumour, which was supposed to be of the medullary character, was removed by means of the ligature. A cure was speedily effected, but within four weeks after the operation, another tumour analogous to the preceding, formed at the inguinal ring of the same side. It soon became as large as a child's head, again filled up one side of the scrotum, and even ascended somewhat in the inguinal canal. Although the parts were insupportably tense, yet there was not any pain; but there was hectic fever, tympanitis, &c., indicative of an abdominal complaint. Notwithstanding the difficulties of the operation, and that the diseased growth to be removed was the result of a relapse, its extirpation was again attempted. The scrotum was rendered tense in its whole length, and an incision was carried above and to the outside of the tumour, an inch and a half above the inguinal ring. The inguinal canal was then laid open in the same direction; then, after some arteries were tied, the tumour, which penetrated into the abdominal cavity, was detached all around, and a ligature was applied about an inch and a half above the external abdominal ring, about half an inch above that part of the cord which was affected with medullary degeneration. At the end of three months the wound had completely cicatrised.

The portion of spermatic cord which had

been removed, which was the seat of the tumour, was changed into a mass analogous to coagulated white albumen, but of a much softer consistence, and traversed here and there by blood-vessels. It is now a year since the operation was performed, the disease has not returned, and the child has continued in health.

A woman, residing in the country, about 48 years old, of a cachectic habit of body, about the turn of life had a tumour formed on the right ankle joint, which had been preceded for some time by wandering rheumatismal pains. A surgeon who was called in applied poultices, and afterwards made an incision into it, but instead of pus blood only was evacuated, and the wound soon put on an unhealthy character, red, soft, fungous excrescences arising from it, and on the slightest cause giving rise to abundant hæmorrhages which exhausted the patient. When she entered the hospital the hæmatoid fungus surrounded the articulation, and even extended over the whole foot; the leg was œdematous, and she laboured under well-marked symptoms of hectic fever. The limb was removed by amputation, and in the course of a few days a slight improvement had taken place in the condition of the patient. In three weeks' time cicatrization was complete, and all appearances of cachexia were removed. An issue was established to prevent any return of the disease. Ten months have now elapsed since the operation, and the disease has not returned.

These two cases, in which medullary and hæmatoid fungus seemed to depend on a peculiar diathesis, together with other analogous cases which have occurred in the course of a practice of twenty-five years, justify me in asserting, that the opinion which considers all these kinds of degenerescence dependent on a pre-existent general cause, is too exclusive. In fact, these local affections are more frequently owing to a specific cause,—to a general derangement of the humours;—but occasionally, also, they are idiopathic, confined to the part in which they are developed, and entirely independent of any general diathesis, at least until they have attained a certain size. I have frequently removed these sorts of degenerated tissues, and the disease has not returned even after the lapse of sixteen, eighteen, and twenty years.

The disease may be considered general, when it is of great extent, and appears in many parts at once, or when there are symptoms of a cachectic habit present. When these signs are not perceptible, we are not warranted in affirming that it is a disease of the system. These means of diagnosis are however very uncertain, for I have seen cases in which there were all the indications of general affection of the system, in which the tumours were removed and not reproduced, and again in other cases, where every thing promised a favourable result, the disease has returned.

Irish or Carragaheen Moss.—The Irish moss, *Fucus crispus* of Linnæus, *carragaheen*

moss, grows in great abundance on the coasts of Ireland: it is also to be found on the shores of the Atlantic, along the coasts of England, France, Spain, and Portugal. In its fresh state it is of a dark green colour; when dried, of a transparent clear yellow colour, and horny appearance. It has an iodine savour, but we have not been able to detect the presence of iodine with any re-agent. It contains very little marine salt, but has large quantities of the sulphate of soda.

The Irish moss has not been employed many years as a medicine. When I was last in London, I saw it used with great success in all diseases of debility, and especially in those cases where there existed a degree of irritation in the digestive or pulmonary organs.

Carragaheen contains a very large quantity of a transparent colourless jelly, free from any disagreeable savour, which acts as a demulcent on the intestinal mucous membrane, and removes, almost without exception, the colic, which frequently accompanies the different disorders to which that membrane is subject: its use in cases of irritation of the air passages is almost immediately followed by a sensation of relief, and by the cessation of the cough. As this jelly can be retained by the most delicate and most irritable stomachs, it is frequently given as nourishment when no other kind can be taken.

The cases in which the Irish moss is administered with advantage are—hoarseness, attended with dry, spasmodic cough; various chronic affections of the lungs, diarrhœa, dysentery, intestinal pains consequent on inflammation, poisoning, or ulceration; in general in all diseases accompanied with much emaciation, and in convalescences after disease, or serious operations. The English physicians recommend its administration as food for a long period in cases of strumous enlargement of the glands.

The Irish moss is generally given in the form of jelly, made either with milk or water; it is rarely employed in the form of decoction. In cases of diarrhœa or dysentery, the English add a teaspoonful of infusion of rhatany to a cupful of the watery decoction of carragaheen. Five or six ounces of the jelly may be given in the course of the day, either in twice or thrice, or else by spoonfuls, when the cough is troublesome; for instance, when taken as food, twice or thrice that quantity may be administered.

The formulæ which I generally prescribe are as follows:

R. Carrag. lichenis, ℥ss.
Lactis vaccin. ℥ix.
Coque ad ℥v. et adde liquori colato.
Sacchari albi, ℥ss. vel ℥j.
Aque amyg. amar. ℥j.

℥. Et sepone ut frigeretur.

R. Carrag. lichenis, ℥iss.
Aque fontan. ℥xij.
Coque ad ℥v.—et adde liquori colati,
Srupi, ℥iss. vel ℥ij.

℥. Et sepone ut frigeretur.

Reviews.

The Clinique Médicale; or Reports of Medical Cases. By G. ANDRAL, Professor to the Faculty of Medicine of Paris, Member of the Royal Academy of Medicine, &c., &c. *Condensed and translated, with Observations extracted from the writings of the most distinguished Medical Authors.* By D. SPILLAN, M.D., Fellow of the King and Queen's College of Physicians in Ireland, Member of the Association of the Fellows and Licentiates of the College of Physicians, and formerly Physician to the Dublin General Dispensary. Part II. London: Henry Renshaw.

THE second part of this work has just appeared. It is divided into two books. The first treats upon the various diseases of the heart and its appendages; the second book on the lungs. The first book discusses, in order, the affections of the pericardium, inflammation and its consequences, thickening of the pericardium, serous effusion, &c., into its bag; next follow the disorders of the heart's substance, and after, serous and sanguineous congestions. The second book describes the manifold changes which the bronchial membrane undergoes in the different parts of its location, the diseases of the pleura, both in its pulmonary and cordal region, and the morbid changes in the parenchyma of the lungs. Each chapter is prefaced with some general observations on the structure and functions of the parts about to be alluded to; then follows one or more well marked cases of the individual disease, illustrating its etiology, its diagnosis, its treatment, the effects of remedies, the prognosis formed by Andral in each case, and, when death ensued, the autopsic appearances are described in a systematic manner, minute in the original, but condensed in the translation, yet sufficiently full and explicit. We subjoin the following cases as exemplative of the contents of the work, making one or two extracts from each book.

"Slight asthma for several years—All at once extreme dyspnoea, the constant increase of which causes death by asphyxia—Serous effusion into the pericardium.—A tailor, 20 years of age, habitually enjoyed good health, for he did not consider as a morbid state, the slight difficulty of breathing, which he felt for several years back whenever he ascended a height or ran. He had lately spent several nights at work. For some days he had cough, when on the 2nd of March, 1820, without any known cause, he was seized all at once with great dyspnoea; the same night he was bled. The 3rd and 4th there was an increase of the oppression. He entered the La Charité on the evening of the 5th, and was bled again; on the 6th, face puffed and livid; lips violet; lies on his back with the neck tense and the head retroverted. Sixty-five inspira-

tions per minute; they are performed at once by the elevation of the ribs and depression of the diaphragm. The respiratory murmur was heard everywhere with strength and distinctness, except towards the inferior angle of the scapula of the right side, where a little mucous râle was heard, owing to the bronchitis which existed for some days back. The chest, when percussed, sounded well everywhere, except at the region of the heart, where the sound was dull. No thoracic pain either had been or was at present felt by the patient; his expectoration was purely catarrhal. The beats of the heart, which were regular, were heard with a slight impulsion in the precordial region: the hand when applied over this region, recognised merely a sort of vague murmur (*bruissement*), where percussion detected the dull sound. The pulse was regular, but hard and vibrating, and its frequency was proportioned to that of the inspirations: the skin was hot and dry.

"What was the cause of the asphyxia in the case of this patient? It seemed neither to reside in the pleuræ, nor in the pulmonary parenchyma, nor in the bronchi. By thus reasoning we came to suspect the existence of an affection of the pericardium. The dull sound at the region of the heart, the *bruissement* found on the application of the hand over this region, indicated even an effusion into this membranous sac. (A third bleeding, thirty leeches to the epigastrium; in the night sinapisms to the legs.) In the evening the patient had a general and a very copious perspiration; but it gave no relief. On the morning of the 7th, suffocation still more and more imminent, continuance of the hardness of the pulse. (Blisters to the thighs; purgative lavement.) He died in the night, five days after the commencement of the dyspnoea.

"Post mortem fourteen hours after death.—The pericardium, when viewed externally, presented considerable distension; it contained nearly a litre of limpid colourless serum, in the midst of which small albuminous flocculi floated. The inner surface of the pericardium presented no inflammatory appearance. The parietes of the left ventricle of the heart were but slightly hypertrophied. The bronchi in general were red, the pulmonary parenchyma infarcted, the liver engorged with blood, and the digestive canal injected.

"Remarks.—With respect to the great quantity of liquid effused into the pericardium, this case bears some resemblance to Case 3; but in the latter the effusion was formed by blood; in the present case it consisted of nearly pure serum, which seemed rather the result of simple active exhalation, than of inflammation properly so called. But who can assign the precise limits which strictly separate these two affections, which in several cases at least appear but different forms of one and the same primary phenomenon? Be that as it may, the existence of this effusion was indicated by the dull sound and the peculiar

bruissement discovered by the hand when applied over the region of the heart. Besides, the beats of the heart, as well as the pulse, preserved great regularity; the pulse continued hard and vibrating. Here are phenomena different from those observed in Case 5; and yet in the two cases there was one and the same state of hypertrophy of the heart. It might be said that here the pulse remained under the influence of this hypertrophy, whilst in Case 5, it was modified by the pericarditis. Here, again, there was total absence of pain: is it because there was here but hydro-pericardium? But in Case 5, it was pus that was contained in the envelope of the heart, and the pericarditis was equally free from pain. Before terminating these reflections, we shall remark, as an accessory circumstance, the slight commencement of asthma observed in this individual, and which was attributable to simple hypertrophy of the left ventricle of the heart, without any obstacle to the orifices, and without any affection in the right side of the heart."

"A woman, 24 years of age, who had been confined eighteen months before, was affected with anasarca and ascites when she entered the La Charité. The first traces of this dropsy manifested themselves a little time after her confinement, and without the patient experiencing any pain either in the abdomen or elsewhere. This woman became gradually exhausted, and died the fourth month after her admission, without any symptom having ever announced in her a lesion of any organ. On opening the body, the peritoneal cavity was found filled with an enormous quantity of limpid serum, without the least admixture of flocculi, or any appearance of pseudo-membranes of either ancient or recent formation. *All the organs were found healthy.* One circumstance alone struck us—the almost complete absence of blood. Thus not only the large arterial and venous trunks contained but a very small quantity of reddish liquid, but the tissues also, such as the intestines, the liver, and the lungs, which are ordinarily found engorged, and where the principal part of the blood appears to be accumulated during the last struggle, or immediately after death,—these tissues, I say, or these organs were entirely colourless and *bloodless*.

"In another woman, 50 years of age, there was anasarca and ascites for the last fifteen months, when she entered the hospital. Neither did this patient present symptoms of a local affection any more than the preceding; like her, she pined away gradually and died. Neither was there any lesion found here which could be regarded as the cause of the ascites. All the organs were healthy, except the stomach, the mucous membrane of which was very much softened towards the great cul-de-sac.

"A man, 22 years of age, who usually resided in the country, had enjoyed good health up to the April of 1821. Then, without any

known cause, without pain, his abdomen became considerably increased in size: it went on increasing very much during the following months, and at the same time the lower extremities became œdematous. Towards the end of July, subsequently to the spontaneous establishment of an abundant diarrhœa, the patient told us that his abdomen all at once became diminished, and the infiltration of his limbs disappeared. But in a short time, notwithstanding the continuance of the diarrhœa, the *swelling* reappeared as much as before: up to the end of October he had diarrhœa, and his debility was constantly increasing. The patient entered the hospital the beginning of the month of November, 1821. At that time his countenance was pale and puffed; the abdomen, completely free from pain, was the seat of an evident fluctuation, and the lower extremities were very œdematous. The breathing was free; the chest, when percussed, sounded well in every part; auscultation pointed out nothing unusual either in the respiratory murmur, or in the pulsations of the heart; the pulse was small and a little frequent; skin not hot. The patient usually had from eight to ten stools every twenty-four hours, consisting of a substance resembling colourless water a little turbid, which was neither preceded nor accompanied by any sort of pain. He complained of being always cold. The urine was very scanty, and still *aqueous, limpid, and free from deposit*.

Four or five days after the patient's admission, 10th November, incisions were made in both thighs; a considerable quantity of serum flowed from them. The purging still continued. On the 11th and 12th, a glass of the decoction of catechu was ordered to be added to his drink, and juniper fumigations. On the night of the 12th, a considerable increase in the purging. On the 13th, there was painful redness around the incisions. On the 14th, the right thigh became the seat of considerable erysipelatous inflammation, which affected all the upper and inner side of it. The pain felt by the patient in this part was so severe as to force him to scream. An attempt was made to moderate the purging by a starch lavement, with the addition of two drachms of diascidium and twelve drops of Rousseau's laudanum. The evacuations were less frequent during the twenty-four hours following. On the 15th, the erysipelas spread; the entire thigh was hard and painful. The bursæ were very much swollen from the preceding day. Pulse very frequent and small; skin hot.

"Nov. 16. The purging returned as severe as before; the skin of the right thigh and of the scrotum of a cherry-red colour; tongue dry; countenance very much changed; despondence.

"17th. Broad eschar on the inner and upper part of the thigh, around it a brown redness of the skin. The erysipelas extended to the anterior part of the abdomen, from the right thigh to the level of the crest of the os

illum. Internally it terminated abruptly at the linea alba. The infiltration of the face was gone; the features were very much changed. The patient was anxious for his dissolution, which he considered as near at hand; his intelligence was intact; his breathing not more than ordinarily embarrassed; the pulse very small and extremely frequent. In the course of the day the patient became more and more exhausted, and died on the 18th.

Post mortem. The brain and its appendages remarkably pale. Lungs of a yellowish white. Heart and its appendages, which presented all the conditions of their physiological state, contained but very little blood; the substance of the heart pale. Peritoneum filled with an enormous quantity of lemon-coloured serum, perfectly limpid; no trace whatever of previous peritonitis. The intestines externally void of colour, seem as it were washed in serum; mucous membrane of the stomach pale and thin; all the internal surface of the intestines remarkably pale, except at the end of the transverse colon, and in the descending colon, where there was a vascular arborisation seated in the mucous membrane. Liver not large, and without colour. Spleen small and firm. Veins remarkable for the extreme paleness of their tissue. The different muscles were also colourless, and as it were wasted.

"This case is remarkable in more than one respect. First, it affords us the example of a dropsy of long standing, which could not be referred to the appreciable alteration of any organ.

"What seems to us no less worthy of consideration, is the very small quantity of blood found in the dead body. We do not here allude to the empty state of the heart and of the large vessels, that being a thing of ordinary occurrence, but the capillary vessels of the different parts of the body, of the brain, lungs, liver, kidneys, intestines, of the parenchyma of the heart, of the substance of the muscles, were equally empty; in a word, it might be said to be the body of a person who died of hæmorrhage. There really was no blood but in two places:—1st, in some vessels of the mucous membrane of a small part of the colon; 2ndly, in the skin of the right thigh, where the erysipelas appeared. Thus, then, we here again find the same coincidence as we already remarked above, between a considerable diminution in the mass of blood, and the existence of what is called essential dropsy. A popular saying has consecrated the belief that, in dropsical subjects, the *blood is turned into water*. This is essentially false in a great number of cases, since there are some dropsies whose existence is connected with a too great quantity of blood, as is the case in many diseases of the heart. But here the case is certainly different; first, the liquids which are formed from the blood, the bile and urine in particular, appear to be secreted, but in extremely small quantity; there is nothing even to prove that bile is produced; if, again,

there is blood in the different tissues, it is at least certain that this blood is in a particular state; that it is deprived of its colouring matter, and that if it still contain fibrine, the latter substance has lost the property of coagulating, and that it is dissolved in the superabundant serum which is everywhere the predominant chemical constituent.

"We have dwelt on these facts, because they seem to us of the greatest importance in a therapeutical point of view. If it can be demonstrated, that in a certain number of cases there is really a connexion between the state of the blood and the formation of several dropsies, it follows that the treatment should be directed to bring back the blood to its natural state: such should be the indication: it would then be for experience to decide whether this indication can be fulfilled. It would, in fact, be necessary to remake the blood, if we may be allowed to say so; but that would be to fall into *humorism*. What matters it, if facts lead us to it?

"Another remarkable circumstance in this case is the very slight alteration presented by the intestinal mucous membrane in an individual affected for a long time with severe diarrhœa. Did it not appear, that in this case there was transudation of serum on the internal surface of the intestines, as took place in the areolæ of the cellular tissue, and in the cavity of the peritoneum?

"In a word, in the midst of this state of anemia, a sanguineous congestion nevertheless took place in the part, where incisions having been made to give exit to the serum, caused a slight irritation; a proof, among a thousand others, that the production of inflammation does not depend on a state of plethora, and that in more than one case, as has been already said, when there even remained but a single drop of blood in the system, it flowed towards the irritated point. It may be here observed, en passant, that this is one of the great objections, which may be made to the method generally adopted in France, which consists in combating every inflammatory process merely by blood-letting more or less copious. It is very certain, however, that if by this means a momentary disorgorgement be effected in the inflamed part, we do not at all destroy in any way the unknown cause, under whose influence the blood subtracted from the ordinary laws of the circulation, tends to accumulate incessantly in the part where the process of inflammation exists.

"What must not be lost sight of is, that in our patient, the erysipelas had scarcely commenced, when the skin, which was the seat of it, became brown and gangrenous.

"In the different cases which we have cited, the serous congestions had lasted several months before they were followed by death, and were developed only by degrees. Here was another case in which the dropsy, equally essential, inasmuch as no organic change could account for it, assumed a much more acute

progress. Further, the pleuræ in this case having become the seat of a double serous congestion, the result was rapid death, in consequence of the constantly increasing embarrassment of the respiration.

"A girl, twenty years of age, entered the hospital (in the autumn of 1825) in the following state:—considerable puffiness of the face; infiltration of the cellular tissue of all the surface of the body; ascites ascertained by the size of the abdomen and by fluctuation. Lies on her back. Respiration short and hurried. The œdema of the parietes of the thorax renders quite unavailing the information which might be afforded by percussion; but posteriorly on the right, nearly on a level with the inferior angle of the scapula, we heard in a very marked manner, 1st, the bronchial respiration without the admixture of any râle; 2nd, the œgophony, or at least a resonance, a peculiar trembling of the voice, which exists in no other part. Nothing indicates a morbid state of the heart. Pulse also natural. This girl assures us that she has been ill but for the last fifteen days: she remarked that her face and limbs became swollen without any known cause; by degrees this *swelling*, at first sight, became more and more considerable. She felt her breathing embarrassed but for the four or five last days. (Blisters to the legs, stimulating frictions on the extremities; diuretic drinks).

"During the three weeks following, the state of the patient underwent no kind of change; then the dyspnœa increased all at once in a very perceptible manner, and we recognised *posteriorly on the left as well as on the right bronchial respiration and œgophony*. However, the dyspnœa increased, and the patient soon died in a state of asphyxia, having retained the use of her intellects up to the last moments.

"The post mortem examination proved the existence of a considerable effusion of serum into each of the pleuræ; nothing else announced that these membranes had been the seat of any inflammatory process. The pulmonary parenchyma, compressed by the effusion, was sound. The heart presented no appreciable alteration; the vessels which enter it, as well as those arising from it, were in their normal state. A considerable quantity of black blood was found in the large veins.

"In the abdomen, the peritoneum contained some limpid serum, without any trace of inflammation. The liver, spleen, and pancreas appeared quite sound. There was nothing remarkable in the digestive tube, except a considerable development of the mucous follicles at the end of the small intestine, which exhibited the appearance of small whitish granulations. But there was another organ which presented a change, which must not be lost sight of: that organ was the kidneys, of which the external cortical and part of the tubular substance consisted merely of a whitish granular tissue, divided into small masses or grains,

which were separated by the remains of the reddish tissue natural to the kidney. In several points, however, some cones of the tubular and mamillated substance were observed to be still intact. Did this particular alteration of the kidneys cause any obstacle to the free secretion of the urine, and consequently contribute more or less directly to the production of dropsy? Be that as it may, this was the only species of lesion revealed to us by the post mortem examination. But if the cause of the disease is here at least very obscure, the cause of death is on the contrary sufficiently evident, it being evidently owing to the double hydrothorax.

"The different facts now cited prove then, that there may be dropsies which recognise other causes than an inflammatory process, or a mechanical obstacle to the circulation."

"*Chronic bronchitis simulating pulmonary phthisis*—Whiteness of the tracheo-bronchial mucous membrane.—A locksmith, twenty-seven years of age, entered the La Charité during the month of December, 1821. For the last two years this man had been tormented with a constant cough; he had never spit blood. When we saw him, he was in a state of marasmus; he expectorated sputa, formed of greenish, round patches, separated from each other, and floating in an abundant serum; these sputa were inodorous, and appeared to the patient to have a saccharine taste. The respiration was a little short; he could lie down in all positions; the chest when percussed resounded equally well in all parts: some mucous râle was heard in different points; there was no appearance of pectoriloquy; the pulse, which was free from frequency in the morning, became accelerated towards evening; every night the patient perspired a little. The digestive functions presented nothing remarkable.

"What diagnosis could be given here? Auscultation informed us to be sure that there was no tubercular cavity; but the aggregate of the other symptoms seemed to announce, that numerous tubercles, commencing to soften, existed in the lungs.

"The marasmus and debility increasing, and diarrhœa also supervening, together with disturbance of the intellects, the patient died in a half comatose state.

"*Post-mortem*.—Seroso-purulent infiltration of the subarachnoid cellular tissue of the convexity of the hemispheres; lateral ventricles distended with turbid serum.

"Pulmonary parenchyma sound, slightly engorged. The internal surface of the larynx, trachea, and bronchi, traced as far as their smaller divisions, presented every where great paleness; the mucous membrane exhibited no other appreciable alteration; white fibrinous concretions distended the right cavities of the heart. The digestive canal, opened to its entire extent, presented no other lesion but a bright redness, scattered in patches over the great intestines.

"If in this case the symptoms presented during life had not been known, and had the mucous membrane of the bronchi been examined without any previous information regarding the patient's state, it would have been unquestionably considered as very sound, and yet it was seriously affected; it was, in consequence of its very important lesion, and of the vitiated secretion of which it was the seat, that the patient was brought, in the space of two years, to the last degree of marasmus, presenting all the rational symptoms of phthisis. Pathological anatomy is then sometimes insufficient to discover the morbid state of the organs. Let us never lose sight of these two great truths, that, on the one hand, necroscopic researches oftentimes disclose lesions of which the symptoms had not excited any suspicion, and that, on the other hand, these same symptoms do not permit us to doubt that an organ may be at times very seriously altered, though it may not appear so at the post-mortem examination.

"We again see in this case an additional proof of the difficulty of distinguishing a simple chronic bronchitis from a tubercular degeneration of the lung. What can auscultation tell us in this case, except that there are no cavities? Let us draw from it this conclusion, that as long as the existence of tubercles shall not be ascertained by the stethoscope, the return to health should not be deemed impossible, by the cessation of the bronchitis, which occasioned all the symptoms. It is against such an inflammation of the mucous membrane of the air passages, that a great number of hygienic and therapeutic means have often succeeded, which, if directed against real phthisis, would certainly fail, or at most would merely retard for a little the progress of the evil.

"33. The inflammatory softening of the bronchial mucous membrane is much more rare than that of the gastro-intestinal mucous membrane. We have seldom found it so marked, as that the membrane could be raised into a pulp; it is very rare, too, to find this membrane ulcerated; and in this respect it again presents a disposition contrary to that of the gastro-intestinal mucous membrane. We have not detected ulcerations in the bronchi more than twice; in one of these two cases there was at the same time a large ulcer in the trachea, a little above its bifurcation; three small round ulcerations existed in the right bronchus, which results immediately from the division of the trachea. With respect to the lesion, this case resembles those detailed by M. Cayol, in his splendid work on Tracheal Phthisis. The symptoms had been those of a common chronic bronchitis. In the other case the trachea and first divisions of the bronchi presented but a slight redness, without any other lesion; but in the smaller ramifications of the right side the redness became very intense, and the mucous membrane presented on its surface a great number of small ulcerations, all

exactly circular, and of equal size. Their edges were livid, and were raised about half a line above the level of the bottom of the ulcer, scarcely large enough to admit the head of a good sized pin. The person in whom this lesion was detected had an aneurism of the heart. During his stay in the hospital he was tormented with frequent and very painful fits of coughing; his sputa were generally tinged with a little blood.

"The frequency of ulcerations decreases from above downwards in the different portions of the mucous membrane of the air passages. Thus, ulcerated chronic laryngitis is common enough. It is not at all rare to find a part of the chordæ vocales stripped of mucous membrane, the thyro-arytenoid muscles and the cartilages exposed, to a greater or less extent, in persons who, affected with simple chronic bronchitis or pulmonary tubercles, had their voice for a long time hoarse or entirely destroyed. What is remarkable is, that in the great majority of cases, these ulcerations exist only when there is at the same time inflammation of the lower parts of the mucous membrane of the air passages.

"34. In the trachea, ulcerations become less frequent than in the larynx; they are generally small, and not at all numerous. Once, however, in a person whom we saw with M. Magendie, who considered the anatomical specimen so curious that he preserved it, we found the entire inner surface of the trachea really like a sieve (*criblée*), from its origin to a little above its bifurcation, in consequence of a number of ulcerations so multiplied and so crowded on each other, that they occupied more extent than the spaces interposed between them. The bronchi were red, but not ulcerated. The patient had complained during life of a continual sensation of heat rather than of real pain all along the entire course of the trachea; each inspiration was accompanied with a remarkable hissing sound (*sifflement*), as if the air tube was compressed by some tumour.

"Ulcerations of the trachea most frequently do not extend beyond the tissue of the mucous membrane; their edge is formed by the latter, and their bottom by the subjacent fibrous tissue. Sometimes, however, the ulcer is deeper, all the parts situated beneath the mucous membrane are destroyed from without inwards, and the result of this may be a complete perforation of the parietes of the trachea. We possess two cases of this kind. In both the perforation took place at the posterior part of the trachea, in its cervical portion. In one of these cases the bottom of the ulcer was formed by the œsophagus, which was united by a dense, close cellular tissue to the circumference of the solution of continuity. In the other case there was double perforation of the trachea and œsophagus, so that there was a free communication between these two tubes. This case of tracheo-œsophageal fistula was indicated only by an inconsiderable difficulty of

deglutition, and by a trifling cough every time the patient swallowed; itself indicated that the obstacle to deglutition and the cause of the cough had their seat in the inferior middle part of the cervical region.

"Perforation of the trachea, or of its first divisions, has been sometimes seen according to a course entirely the reverse of the preceding, to take place from without inwards; besides the aneurismal tumours, which often produce this sort of perforation, tubercular lymphatic ganglions also sometimes produce it. This lesion, of which we know no instance in the adult, is not very rare in children; which is owing, no doubt, to the greater frequency of the tubercular degenerescence of the lymphatic ganglions in the early period of life. These tubercular ganglions, according as they become soft, irritate the parietes of the trachea or bronchi with which they are in contact, and gradually cause their destruction from without inwards. The progressive course of this ulcerative inflammation may be followed in different subjects: thus, in some we only find a close adhesion of the tubercular ganglions and tracheal or bronchial parietes, with redness of the latter, commencing destruction of the cartilages; in others, the cartilages no longer exist, the fibrous tunic has disappeared, and tubercular substance is found in immediate contact with the mucous membrane, which it pushes and raises before it. In fine, in an extreme degree, the mucous membrane is itself destroyed, and the tubercular matter, leaving the ganglion according as it softens, spreads over the air passages, from whence it is ejected by coughing. Tubercles developed in the bronchial ganglions may heal in this way in the same manner as tubercles seated in the subcutaneous ganglions. But, unfortunately, these tubercles of the bronchial ganglions very rarely exist without there being at the same time pulmonary tubercles.

"These perforations of the parietes of the trachea very closely resemble the variety of intestinal perforation, which takes place as here from without inwards, and which is caused by sub-peritoneal tubercles."

"*Acute bronchitis—Measles—Premature disappearance of the eruption; fatal dyspnoea.*—A baker, twenty years of age, of good constitution, living in Paris only for the last two months, and affected for the last five or six weeks with a slight diarrhoea, presented on the 10th of April all the precursory symptoms of measles—redness of the eyes, coryza, hoarseness, and cough. The same state on the three following days. On the 14th, the eruption appeared; the patient kept his bed. On the 15th, the entire body was covered; entered the La Charité on the evening of this day. The eruption was then confluent, and quite characteristic; pulse hard and frequent; redness of tongue and lips; violent cough; no other bad symptom. Towards the middle of the night the patient felt some oppression; this increased rapidly, and on the following

morning, the 16th, we found the patient in a state of half asphyxia; eyes full and prominent; face purple; breathing short and very frequent, performed both by the ribs and diaphragm; cough almost constant, some mucous sputa; the chest, when percussed, sounded well in every part; auscultation caused some mucous râle to be heard in different places. Of the eruption there remained only some pale spots just on the point of disappearing. The pulse preserved its frequency and hardness, and the tongue its redness. This group of symptoms seemed to indicate the existence of a pneumonia; however, the pathognomonic signs of this affection were completely wanting. Could a simple bronchitis, by its extreme acuteness or sudden exasperation, give rise to so intense a dyspnoea, and could this inflammation joined to that of the primæ viæ explain the very severe state into which the patient had so suddenly fallen? Be that as it may, the indications to be fulfilled were no longer doubtful. The internal inflammation must be diminished and that of the skin recalled. To this end, twenty leeches were applied over each side of the chest and ten to the epigastrium. After the blood ceased to flow, a blister was applied to each leg. The skin was rubbed with volatile liniment.

"Considerable relief followed this treatment: in the evening the breathing was much less embarrassed, cough easier, tongue lost its redness; however, the eruption had not reappeared.

"17th. We observed nothing but the symptoms of an intense bronchitis. Breathing but very little hurried.

"18th. Fever nearly gone, and the opaque appearance of the sputa announced the approaching termination of the bronchitis. All at once, in the evening, the breathing again became very embarrassed; he was bled to twelve ounces.

"On the following morning, the dyspnoea was still considerable; frequency of the pulse increased. (Two blisters to the thighs.) All this day the state of suffocation increased more and more; on the 20th, there was lividity of the face, lips were of a purple tint, there was orthopnoea. One would have said that the patient was dying of aneurism of the heart. Died a little after the visit.

"*Post mortem.*—The mucous membrane of the larynx, trachea, large bronchi, and their smaller divisions intensely red. In some parts of the first divisions of the bronchi there were found some white membraniform concretions, similar to the false membrane of croup. The pulmonary parenchyma was sound and crepitated in every part of its extent; posteriorly it was engorged; heart healthy; clots of deep black blood in the right cavities. Stomach white, as well as the small intestine, which contained a considerable number of ascarides in its lower fourth. The cæcum contained some trico-cephalous worms; its mucous membrane presented near the valve a

red patch, from which three or four small conical vegetations were raised three or four lines long. The rest of the large intestine was white, and filled with liquid feces; liver engorged with blood; spleen large and firm. A great quantity of serum infiltrated the sub-arachnoid cellular tissue; cerebral substance not injected; the lateral ventricles, particularly the right, distended with much limpid serum.

"This case would have been considered in former times as an instance of the repulsion of the measles. In the medical theories of the present day, the extreme difficulty of the breathing, the intense fever, and, in fine, the death by asphyxia, will be accounted for by the intensity of the bronchial inflammation; thence, also, the premature disappearance of the cutaneous eruption. This inflammation was abated for the first time under the double influence of the blood-lettings, and of the revulsives with which the skin was covered; but two days after the dyspnœa reappeared: it did not yield to another bleeding, and its constantly increasing progress terminated in the patient's death. It is certainly very uncommon to observe such a group of phenomena without lesion of the pulmonary parenchyma or of the pleuræ, of the heart, or large vessels. Is it not, however, very conceivable that an inflammation which attacks suddenly or with extreme violence so extensive a surface as that of the entire bronchial mucous membrane, should excite in the system as much disturbance, at least, as the inflammation of a circumscribed portion of the gastrointestinal mucous membrane? Do we know sufficiently the nature of the change produced by the air on the blood, in order to know how far an intense inflammation of the small bronchi may not prevent this necessary change? thence, perhaps, the principal cause of the dyspnœa, the asphyxia, &c. In fine, those who admit the existence of nervous dyspnœa, and essential asthmas, might equally cite the preceding case in support of their opinion; they would say that they often saw the bronchial mucous membrane as intensely inflamed without any perceptible dyspnœa resulting from it; from this they would conclude that, in the present case, the dyspnœa was an essential disease, independent of the inflammation of the bronchi. There was a time, also, when persons would not have hesitated to consider the worms found in the intestines as the principal cause of all the phenomena, so varied are the points of view in which one and the same fact may be regarded, so different are the consequences which each person may deduce from them, according as he is guided by such or such a theory.

"One must be struck, no doubt, with the great quantity of serum which filled the cerebral cavities; however, the intelligence remained intact to the last. If the patient had presented any signs of delirium, convulsions

or stupor, these symptoms would have been at once referred to this effusion, which would then have been called acute hydrocephalus.

"The inflamed state of the cæcum explains sufficiently the diarrhœa which existed for the last six weeks. This fact is perhaps of some importance, because we have rarely an opportunity of ascertaining the state of the intestines in cases of slight diarrhœa, which exist for a long time without causing either fever or any perceptible disturbance of the system."

We said perhaps sufficient in our notice of the first part of the work to give it currency; we showed what we but show now, and what we doubt not was sufficiently appreciated, that Andral is unquestionably the greatest pathologist of modern times; he stands alone in our opinion—he has no rival; therefore a work like the present must confer incalculable benefit on the profession in this or in any country. Dr. Spillan, the translator, the able commentator and emendator, deserves the thanks of the British profession in presenting so admirable a work, especially so cheap a work, to the British public.

REVIEW OF FOREIGN MEDICAL LITERATURE.

Education Physique des jeunes Filles, ou Hygiène de la Femme avant le Mariage. Par A. M. BUREAUD RIOFFREY, Docteur en Médecin de la Faculté de Paris, Membre de plusieurs Sociétés savantes. Paris: Rouvier et Bouvier. Londres: Dulau et Cie. 1835. Pp. 353, avec une Planche.

On the Physical Education of young Girls, or the Hygiene of Woman before Marriage. By A. M. BUREAUD RIOFFREY, Doctor in Medicine of the Faculty in Paris; and Member of many learned Societies. Paris: Rouvier and Bouvier. London: Dulau and Co. 1835. Pp. 353, one Plate.

THE present work may be looked upon as a rarity in scientific literature. Occasionally, indeed, some authors have given a chapter or two containing remarks on the physical education of the sexes, more especially at an early period anterior to puberty; but the ideas therein eliminated are in general so crude and undigested, as to afford but little information—but little real instruction to their readers. Dr. Bureaud Rioffrey's work, on the contrary, is a monograph, specially devoted to the subject he treats of, in the investigation of which he has long been engaged, and consequently we have reason to expect that the book will well repay us for the time spent in its perusal.

We have not yet stated, we believe, that this production is what is generally called a popular one: that is, it is written with the view of affording instruction to mothers, maiden aunts, &c., and those old ladies who may take an interest in any young female of their acquaintance, and may possess sufficient influence to effect a change in the manner in which the

aforsaid *jeune fille* is physically educated. To render the directions, &c. of easy comprehension, they are written in a quiet untechnical* style, and, by way of making "assurance doubly sure," a glossary is added. As a general rule, we do not approve of works which tend to render medical subjects "easy to the meanest capacity;" the sole object must be puffing off the writers, while its real effects are dangerous in the extreme. How few are there of our brethren but can testify to the truth of this fact. The patient, or his friends, who put their trust in the recipes and directions of a popular medical writer, tamper not unfrequently with a severe and dangerous complaint, until it is almost, and sometimes quite, beyond relief; and then the doctor is called in to witness the dying agonies of the sufferer, and the bitter self-upbraidings of the friends and relatives. Should there be but one such case fully proved, and numbers might be duly authenticated were it necessary,—should there be but one case decidedly shown to depend on such a cause, it were sufficient to sign the warrant of committal for such books to the cave of oblivion.

These observations do not apply to the author of the book before us. A work on physical education should be written for the information of mothers, as it but seldom happens that medical men can or do take young females sufficiently under their care to superintend them during their advance to puberty: a most interesting period of their lives, and one fraught with danger from a thousand causes, and which are increased a million-fold by the conduct at present pursued in rearing them. To point out these rocks and shoals, on which the health of many a young female has been wrecked, is the object of the present work, at the same time indicating in what manner they are to be avoided. Dr. Bureau Rioffrey has accomplished his task in a complete and excellent manner. The work is exceedingly well written, and one of the most interesting which we have perused for some time. It is, however, rather too scientific; a fault into which most medical men fall when they write a popular book.

Traité des Signes, des Causes, et de la Cure des Maladies, Aiguës et Chroniques; Ouvrage d'Arétée, traduit du Grec, avec un Supplément et des Notes. Par M. L. RENAUD, Docteur en Médecine des Ecoles d'Edimbourg et de Paris, ancien Médecin des Hospices de Fougères et des Epidémies pour l'Arrondissement Communal. 1 vol. in 8vo. Paris. 1834.

A Treatise on the Symptoms, Causes, and Treatment of Acute and Chronic Diseases;

* Untechnical. This word, perhaps, will not be found in Johnson's Dictionary; but we can only say with the Frenchman—"Si ce n'est pas Anglais, ce devait être."

translated from the Greek of Aretæus, with Notes and a Supplement. By M. L. RENAUD, M.D. of Edinburgh and Paris, &c. &c. Paris. 1834.

A real service has been rendered the less classical members of the profession by the translation of the valuable dicta of one of the most talented of our ancient medical writers. The style of Aretæus is so clear and energetic, his descriptions so exact, and his judgment so excellent, that his work has stood the test of ages, and how few are there of the works of the present day of which such a statement will be made hereafter? How few of these will be standard productions, works of reference, or even have their titles mentioned, ages hence? It seems strange that an individual should have it in his power to criticise a book written ages before he himself was in being: in fact, however, it is impossible to attempt such a labour, and we must be contented with recording our thanks to the translator of the work. Its perusal will sufficiently convince any one of the truth of the saying of old—

—"there were giants in those days."

Traité Élémentaire d'Anatomie comparée, suivi de Recherches d'Anatomie Philosophique ou Transcendante, sur les Parties Primaires du Système Nerveux, et du Squelette Interieur et Exterieur; accompagné d'un Atlas de trente et un Planches, in 4to. Par C. G. CARUS, Conseiller et Médecin du Roi de Saxe, &c. &c. Traduit de l'Allemand sur la seconde édition, par A. J. C. JOURDAN. -3 vols. in 8vo., et l'Atlas en 4to. Paris. 1835. Baillièrè.

An Elementary Treatise on Comparative Anatomy, with Researches on Philosophical or Transcendent Anatomy, on the primary Parts of the Nervous System, and on the internal and external Skeleton: with an Atlas, containing thirty-one Plates, in 4to. By C. G. CARUS, Counsellor and Physician to the King of Saxony. Translated from the second edition of the German, by A. J. C. JOURDAN. 3 vols. in 8vo., with an Atlas 4to. Baillièrè. London and Paris.

Comparative anatomy has of late years been made a subject of study in our English schools of medicine, more especially since the establishment of a chair in the London University. As experiments are most frequently made on animals with various substances, with the view of discovering their medicinal or their toxic effects, and as also not unfrequently experiments are performed in order to ascertain certain physiological actions, the utility of certain organs, the propriety of certain operations, &c., and as these, it is presumed, are always done with reference to their ulterior application to the human race, it becomes a matter of necessity that the animal economy of the creatures thus experimented on should be so well

known, as to enable us to compare it with that of man, and the physiology of his organs. In this point of view comparative anatomy can never fail to be of interest and of the highest importance to the medical practitioner, while the philosopher and the physiologist, titles which we hope belong to the major part of our professional brethren, will always derive renewed and never-ending pleasure from an examination of the internal structure of the wonderful works of the Divine Omnipotence. Who is there, on contemplating the extraordinary adaptation of the beautiful mechanism of nature to the functions to be performed, cannot but be filled with pleasure and admiration of the display of goodness, wisdom, and beneficence on the part of the Almighty Creator? there is nothing wanting, nothing superfluous in His works; all is perfection; and truly indeed has it been said, altering a little the words of Young, "an undevout anatomist is mad."

A science, by the aid of which Harvey, Duverney, Malpighi, Ruysch, Haller, Vicq d'Azyr, Daubenton, Hunter, Camper, Scarpa, Ssemmering, Blumenbach, Meckel, Tiedemann, and a host of others, have been enabled to enrich its sister sciences, and materially enlarge our knowledge, can never fail to interest our profession, and claims the best attention of its members. That science to which Cuvier devoted a life must be one of incontestable utility and beauty.

The most extraordinary of the three volumes now under consideration is decidedly the third: it contains the author's ideas on philosophical or transcendent anatomy, in which he follows out the opinions of the German philosophers, who consider that all organised beings may be looked upon as modifications of the substance of the Deity, as manifestations of his life. Thus they regard the entire system of the creation as one immense chain, being the development of *unity*, of the *whole*, under the evanescent forms of the world, its plants and its animals, ascending in the scale up to man, who is the completion of this harmonious whole. In this volume, then, our author essays to prove the existence of this chain throughout the whole animal creation, and in following out his reasoning he adopts not a few of the observations of his countrymen Goëthe and Oken. Those whose minds are so constituted as to delight in metaphysics, will be pleased with this part of the work, while other philosophers and physiologists will find their account in the first and second volumes, which embrace the study of comparative anatomy, properly so called, and are enriched with many new facts and remarks by Dr. Carus, who has himself observed many of the species he describes. In the first volume he treats of the nervous, osseous, and muscular systems, together with the five senses, and the electrical and phosphorescent organs of many species of animals. The second volume is devoted to the consideration of the

comparative anatomy of the organs of digestion, viz. of mastication, deglutition, &c.; of respiration, of the secretions and excretions of the circulatory system (sanguineous and lymphatic), the genital organs of both sexes, and a large development of the fœtus in the whole range of the animal creation. Our readers will from this short summary perceive at once the immense extent of the subject, which is exceedingly well treated by the author, whose work bears evident indications of science and extensive erudition.

SPEAKING MACHINES, NO. IV.

(Concluded from page 788.)

De Kempelen's Speaking Machine, Description of—Method of using—In what defective.

DE KEMPELEN'S speaking machine consists of an oblong box (three inches and a half long, two and a half wide, and one and a half high), air-tight everywhere, except at its ends, in each of which there is a hole.

Into one of these, the nozzle of a double bellows (one foot and a half long) is introduced; in the other, an organ reed, of the pitch of an ordinary voice, is fixed. When the bellows is pressed, air is forced into the box, and, making its escape through the reed, throws the tongue into sonorous vibration.

The sound of the reed is made to issue through a conical tube of Indian rubber (about two inches long, two inches in diameter at the widest, and one inch at the narrowest part), whose smaller end is fixed to the margin of the hole containing the reed, while its wider extremity is free.

The bellows represents the lungs; the oblong box or *porte-vent*, the tracheæ; the reed, the vocal chords; the Indian rubber bell, the mouth. From the hinder portion of this cavity, that is to say, from the part neighbouring the reed, proceed two short tin tubes, which represent the nostrils, that pass in like manner from the back part of the cavity of the mouth near the vocal chords.

The mouth is closed more or less completely by the palm of the left hand, which therefore stands instead of lips. The nostrils are closed upon occasion with two fingers of the right hand.

De Kempelen has not yet furnished the mouth with teeth or a tongue, and those sounds which require the concurrence of these organs for their utterance, are consequently obtained by separate contrivances connected with the *porte-vent*, and wholly independent of the Indian-rubber mouth. These we shall presently describe.

Having now got lungs, windpipe, larynx, mouth, nostrils, and lips, let us see what sounds the machine can pronounce; and here

the reader is advised to refer to the description of the five primary positions of the natural organs in the last number.

If the tin nostrils are closed with two fingers of the right hand, and the bellows pressed by the right elbow, so as to sound the reed, the series of vowels may be obtained by covering the mouth of the bell to a varying extent with the palm of the left hand, at the same time altering its concavity, and the pressure of the air, according to rules which, by a little practice, are readily learnt.

The sesonant M, which is formed naturally by closing the lips, sounding the vocal chords, and allowing the air to escape through the nostrils, is obtained from the speaking machine by covering its mouth with the palm of the hand, sounding its reed, and allowing the air to issue through its tin nostrils.

The consonant P, which a man utters by closing the lips and the nostrils, producing a pressure of air from the lungs, and then suddenly giving it vent by opening the mouth, is obtained from the speaking machine by closing its mouth and nostrils, pressing the bellows, and suddenly releasing the air by removing the left hand from the bell. But the articulation so obtained was an imperfect P: it was accompanied by a slight sound of the reed, which deprived it of its purely aspirate character, and gave it the tone of the vocal B. For although the mouth and the nostrils were accurately closed, so that a stream of air could not flow through the reed; yet, when the bellows was pressed, so that the air became more dense in the oblong box than in the bell, a small quantity passed through the reed to restore the equilibrium of pressure in the two cavities, and this caused in its passage a few vibrations of the tongue.

To remove this defect, Kempelen connected the box and the bell by a tube of the size of a common quill; the pressure in the two cavities was thus equalised, and the reed remained silent till the mouth was uncovered for the pronunciation of the succeeding vowel.

But another fault still remained. For producing the explosive noise that belongs to P, a degree of pressure was required, which made the following vowel unpleasantly loud. It became necessary, therefore, to supply the extra pressure to the mouth without strengthening the vibrations of the reed.

For this purpose a little bellows two-and-a-half inches square was connected by a tube with the cavity of the mouth. When the mouth and nostrils were shut, and the large bellows pressed, this lesser bellows was of course distended with air, which was jetted by the action of a steel spring into the mouth so soon as the hand was suddenly withdrawn. Due force was thus communicated to P (and to the other explosive letters) without affecting the intensity of the subsequent sound.

B, which is simply P accompanied by the voice, is obtained by making the foregoing arrangements, but allowing a little air to escape

from the bell, so that the reed may slightly sound.

The aspiration H is imitated by pressing the bellows so gently that, although the air issues freely through the tube that has been described as joining the porte-vent and the mouth, yet it does not throw the reed into sonorous vibration.

For L the nostrils are closed, the reed sounds, and the thumb is placed within the bell so as to divide the current of air into two streams; an exact counterpart of the natural action, in which, the nostrils being closed, the lips open, and the tongue erected in the middle of the mouth, the breath passes forth by the outlet on each side.

We now come to some further mechanism which serves instead of the tongue and teeth in the pronunciation of S and Z, SH and ZH, F and V.

For S the air is driven out of the oblong box through a narrow slit, one side of which is sharp and the other flat. This aperture is



closed by a valve within, which is raised by pressure upon a small lever or key.

If the mouth is imperfectly closed, so that the reed is permitted to sound, this aspirate sesonant is vocalised into Z.

For SH, an instrument like the top of a penny whistle, cut off and stopped at the lower end, is fixed in an aperture of the porte-vent, and permits the air to escape with the rushing sound required. It is commanded like the latter by a valve and key, and is vocalised into ZH by combining with its aspiration the sound of the reed.

For F, the air is forcibly expelled through several small holes drilled in the top of the porte-vent, the mouth and nose being carefully shut; and for V, the tone of the reed is superadded to this sound by adapting the hand with less accuracy to the bell.

Kempelen's R, which is very imperfect, is produced by a contrivance for imparting a rattling sound to the tone of the reed. (The rapid succession of small bubbles caused by blowing through a globule of wet mercury with a glass blow-pipe, produces a rough sound very closely resembling that of R, and if the mercury is placed in a phial, the air in its cavity affords a resonance which very considerably improves the effect. It would be difficult, however, to obtain by these means a sound sufficiently loud to correspond with the others.)

For G, K, T, D, and N, Kempelen has not yet invented any distinct apparatus; but he has himself, from long practice, acquired a knack of so modifying the tone of P (by particular methods of removing the hand from the mouth, &c.), as to imitate, though not perfectly, the four first of these letters. He gives minute directions for the construction of

a threefold tongue, which he has not tried, but which he believes would perfect these sounds.

N he obtains by speaking M, and then closing one nostril-tube. It is not easy to comprehend the reason of this change. No such effect is produced by a similar arrangement of the natural organs; one can pronounce *mama* as well with one nostril shut as he can when both are free. It is therefore probable that the N thus obtained is not a perfect articulation.

If the sound M is pronounced, and the hand is then quickly removed from the mouth, the nostrils being at the same moment closed,—if, in other words, the sound *ah* be made to follow the sound M, the syllable *mah* is heard, and if this manipulation is performed twice, the word *ma-ma* is distinctly pronounced. If instead of being entirely removed, the hand is slid into the position of E or O, or any other vowel sound, the syllable *me* or *mo*, v. c. will be heard. If while the mouth and nostrils are accurately covered the S key is touched, and while the valve is closing again, the hand is placed in the position for *e, o, ah, &c.*, the syllables *se, so, &c.*, will be pronounced.

If after uttering *mē* the hand be thrown into the position for L, the word *mēl* (meal) is spoken; and by thus adding letter to letter, and syllable to syllable, very long and difficult words may be pronounced. De Kempelen says that he is able to play all Latin, French, or Italian words with very few exceptions, although with a long German word he rarely succeeds. He instances *papa, mama, Marianna, maladie, astronomie, anatomie, pantomime, Constantinopolis, Monomotapa, Mississippi*, with many others; and of sentences he examples—*vous êtes mon ami, je vous aime de tout mon cœur*; and in Latin—*Leopoldus Secundus, Romanorum Imperator, Semper Augustus, &c.*

Such is an outline of Kempelen's instrument and the method in which it is used. Simple as his contrivances seem to be, and imperfect as in their present state they undoubtedly are, yet the invention has cost him years of labour.

"I was fain," says he (after describing the failure of his repeated attempts to obtain all the vowels), "I was fain to content myself with listening to my three vowels; and in a short time I set to work for some consonants, in order that I might be able to pronounce syllables. P, M, and L, were the first that occupied me—but I am almost ashamed to confess it—two years elapsed before I discovered them; and even when I could produce them separately, I found it impossible to unite them into words; they were always separated by a kind of aspiration, the second sound beginning abruptly and without flowing from the first; thus, in attempting to pronounce *papa*, a word somewhat resembling *p-ha-p-ha* always followed. All my pains, therefore, had not advanced me one step; I was forced to throw away the work of two years and begin anew.

"But I am not going to tire my readers

with an account of my unsuccessful attempts. It is sufficient to say, that a strong horse could scarcely draw a wagon upon which should be piled all the mechanism that I have been obliged to reject."

Thus have ingenuity and perseverance accomplished what genius alone would have abandoned in disgust. The ambitious student should bear constantly in mind, that vigorous and sustained exertion is the single road to intellectual superiority. A man is measured not by what he *can* do, but by what he *does*,—not by the powers which rest within, but, by those which are brought to bear. Talent without application profits as little as application without talent. The union of opposite qualities—as scope of intellect with concentration of thought—a rapid genius with patience of mental toil—this alone is rare, and this alone great. One deficiency often precludes greatness. There are many great men—*all but*—and ENERGY is the quality most frequently absent. The idler who yet congratulates himself upon the possession of genius, is no wiser than the man who extolled his good luck in drawing very next to the great prize in the lottery.

To return; much yet remains to be done before the speaking machine can reach perfection. Several new articulations must be supplied, and their true delicacy of pronunciation given to those which Kempelen has already obtained. It must be fitted with keys that may be played on like those of an organ, and with stops and pedals for modulation and emphasis. Such a machine once completed, it would be easy to enlarge its dimensions, and the intensity of its voice to any required extent; so that it might be employed, in the language of Darwin—"to command an army, or instruct a crowd."

"Instruct a crowd!" Imagine the gigantic engine planted on a rising ground in the midst of a vast multitude rapt in still and silent audience, as in deep tones it rolls forth Johnson's sounding periods—or the mysterious revelations of Milton—or Pope's harmonious measure—or Shakspeare's fervid verse.

Indeed, there is no incitement wanting to those who have the talent and the time to carry on so noble a project; admitted, that in its present condition the speaking machine has very limited powers, and can only be regarded as a philosophical toy, we have yet the early history of every important invention, to authorise our boldest anticipations; and we may answer the "*cui bono*"-ists, with Franklin's parody—"What's the good of a baby? Why that in time it will come to be a man."

[The writer is desirous to acknowledge himself indebted to a Lecture by Professor Wheatstone for several remarks in the first paper of this series, and also for some references that have been useful in drawing up the others. The writings that have been consulted, are specified in the text; and he has been careful to distinguish such remarks as rest on no better authority than his own.]

ABSTRACT OF THE EVIDENCE TAKEN
BEFORE THE PARLIAMENTARY
COMMITTEE, IN 1834.

(Continued from page 792.)

SIR ANTHONY CARLISLE examined.

OUR knight, in whose facetious company we are delighted still to find ourselves, exhibits, in the following portion of his examination, so much drollery and raciness, so much pungency and piquancy, that, at almost every answer he enunciates, we are obliged to guard our very ribs from cracking with both hands, lest our laughter should end in divers serious fractures, or even a couple of well-shaped pyriform herniæ. Verily our knight is the prince of chirurgical jokers, and must be descended, *maugre* his name, from the loins of some of those joyous spirits who were wont, in times gone by, to "set the table in a roar," and extract risibility out of the rigid buccinators of Rhadamanthus, or even *his* Iron Master's "black haltered Pluto and his brazen corps of coadjutors." While our jaws expand and our eyes water with the excess of our admiration, we behold fitting, as it were, before our bedimmed optics, Comus and his crew, led on by Joe Miller, who, we swear it, is chief fiddler to that respectable and laughter-loving community. Anon, a change passes over the spirit of our vision, and Falstaff fat, and Nym, and ancient Pistol, not forgetting red-snouted Bardolph, their jaws dilated to an extravagant width, tumble heels over head before our view, and perform such somersets as defy description. So, as our knight has it when he jumps at a conclusion, we adjourn to the examination.

Q. "Are there not countries where women bring forth in the field, deliver *themselves*, carry home their child, and undergo no interruption to their usual occupations; and do such countries afford an example for us to follow?"—A. "I believe in many countries it is so said, and it is assumed to be peculiar to one climate; but (oh! that BUT) I understand from Capt. Ross that, among the northern Esquimaux, people with whom he (not I) lived, the females go to work, and *lug* the child (by the pilchers?) about, wrapped up in a bit of bear's-skin (or hare-skin, we are not certain which, but we may reasonably conclude the latter, as it would be more consistent with the fact of achieving parturition in the fields), an hour or two *after* (qy. 'before?') it is born. So also in Lapland, where there is neither man-midwife nor woman-midwife." (We have an especial horror of that title *man-midwife*, and would place every obstetrician, so designating himself, for the space of an hour or two daily, cross-legged upon a wooden milestone, there to lubricate, perched on his fellow-misnomer, until he consented to disclaim the female part of his professional cognomen; "*man-mid*" would be infinitely more

becoming). But, to proceed:—Q. "To what do you ascribe this apparently slight degree of constitutional suffering which parturition occasions in certain countries?"—A. I purposely mentioned the wide range of China for sake of showing that it is not climate or civilisation. Because it is the same whether the wind blows hot or cold; in the highest state of artificial life among the refined orders of the Chinese, and in the rudest and most uncultivated state among the lower orders of Chinese." (Perhaps the learned knight will inform us where and how he has obtained all this exact information about the manners and habits of a country which is so jealously protected from the prying inquiries of foreigners: for our own part, we believe that but little is *certainly* known of the customs, &c. of those who inhabit the interior of China).

Q. "Is it a fair inference, that because no succour is necessary in one country, where parturition is easy, therefore it is not wanting in this country, where parturition is difficult?"—A. "There is a *slight* exception to that in our own country. We have been obliged to make laws, to prevent clandestine parturition *in women*." (Now comes a home *thrust* at the race of mop trundlers, broom tormentors, greasy culinaries, *et id genus omne*; here it is) "Servant girls, for example," (aye, make an example of them, they have got no friends; and the tabbies, senior and junior, will vote you a frying-panful of red-hot thanks for your zeal.)—"Servant girls who are got with child, if they do not give notice of their condition, are amenable to punishment." (Well, but so are other girls, are they not?) "Now that has arisen from the *notorious fact*, that *girls* have been delivered *sometimes* in the same chamber where *another woman* slept, without its being discovered." (The other woman slept so hard and snored so loud?) "In such cases it was not known, either that the woman (the *girl*, for the *woman* was snoring away) had been delivered, or that she had been with child." (How then, Sir Anthony, have you come to know it: was it in the same way that you obtained your knowledge of the lack of mid-wives among the Chinese?)

To the inquiry, "whether our knight," (we delight to call him so) "was opposed to the admission of midwifery practitioners into the Council, and against the College examining in midwifery?" he rejoined "that he was entirely, because he thought the teachers of midwifery would never consent to it, since it would subject their pupils to inquiries which would, *perhaps*, lead to the rejection of a great many of the students who have been instructed by man-midwives of *supposed* capability." Now, although we cannot feel otherwise than good-humoured and jocular with our amusing friend the knight, nevertheless, here is an assumption which we cannot altogether tolerate. What! are men-mids—(our readers must absolutely excuse our writing down the tail of this nick-name "*wives*,"

The very mention of it in conjunction with men and mid horrifies us; our imagination, directly upon thinking of the three monosyllables cheek by jowl, conjures up a two-legged hermaphroditic phantom, which brings the cramp both into our throat and pen. We instinctively pause at the last syllable, and reject it)—What! we say, are men-mids of "supposed capability" supposed by our knightly chirurg. incapable of fitting out a pupil's knowledge-trap (excuse us again, gentle reader) with as much professional information as will enable him to pass the ordeal of a fair examination in the science of obstetrics? Does our sweet knight arrogate all sound information to himself and fellow-councillors? But let us keep jogging (not the knight, but his *examination*). Q. "Is it because it is below the dignity of the Council to receive *such men* into its body, that you object to their reception?"—A. "I consider it derogatory to any liberal man to assume the office of a NURSE, of an OLD WOMAN; and that it is an *imposture*—(a paviour's sigh here)—to pretend that a medical man is required at a labour. The *craft*, therefore, involves imposture, mischievous interference, and *gross indecency*." (Hear this *ex cathedra* denunciation, shades of Denman, Clarke, and Co. Bodily you were craftsmen, impostors, and culprits, guilty of gross indecency, according to our Pundit knight, and what your phantoms may be suffering spiritually now for the crimes of the flesh, remains alone for your accuser and tormentor to explain; probably he will do so at his next examination: but let us proceed.) "Not only is it (midwifery) beneath our dignity, but it is not within our province. I do not consider the delivery of a woman as a surgical operation; it is a natural operation. The men-mids have recourse to surgical operations to *make themselves in request*, and to make it believed that parturition is a surgical act. All interference, in *my opinion*, is injurious."

Here the questions with which our "favourite" was shored upon this particular head ceased, and no further opportunity was given him of expatiating on his innocent abhorrence of midwives and mid men. Ill-natured readers may feel inclined to accuse our facetious friend, Sir Anthony, with egotism, sophism, and a good many other "isms;" but we candidly confess that we consider him to have made a very good running fight against the pertinacity and brain-searching acuteness of the Committee who thus hauled him over the coals. Scarcely was one answer out of his body, when another, puzzling his cerebrum in a tenfold degree, was demanded. Question followed question, "trick and heavy," and we are really of opinion that no brain endowed with less hardness than that which the grand climacteric generally bestows, could have withstood the test of this shoring, or retained its obstinacy so long. The novel position, that midwives not existing in China were therefore not re-

quired here, excited astonishment; but the shaft of surprise glanced lightly from the dense caput against which it was directed, and only kindled into redoubled flame the sparks of wrath which were cradled there. The glorious explosion against midwifery at length took place. That "the CRAFT involved imposture and gross indecency." Enough! Sir Anthony, enough, we repeat, hast thou suffered in this terrible conflict between thine own and the PUBLIC opinion! Enough hast thou perpetrated to show how vastly thy talent has, avalanche-like, "agglomerated" since thy tender faculties began to sprout; but, alas! Sir Anthony, it grieveth us to be constrained to add, that, like the falling Alpine snowball we have just named, thine acquisitions have been in a descending direction. Nevertheless, Sir Anthony, (we glory in that "SIR," it hath a refreshing, substantial, and alderman-like sound)—nevertheless, Sir Anthony, thy descent hath not been altogether unfavoured by that fickle flirt Fortune, since, in thy way downwards, the hood of a knight alighted within thy reach, in which thou art now securely ensconced. So far, so good. As for the rest—thou wilt find in Pliny the following verse, which we have culled for thy particular edification. The sage writes—"Nemo mortalium omnibus horis sapit," which a Persian would translate—"The wisest man may chance to sneeze at dinner" (an unlucky occurrence); but, *done* into our vernacular, it would run thus: "The most facetious wight may chance to tumble into a quandary." Thou, O Sir Anthony, mayst perhaps enlighten us with a third translation, which doubtless might hop thus—"We are *sometimes* likely to err in our opinions;" and on this I should like thee to pause and ponder. Thine opinions do not travel in a circle as other men's, but glance off at a tangent, and become eccentric. Thou wouldst be a comet, albeit thou lackest the tail of that vagabond luminary, and therefore wilt not be able to steer thyself clear of thy more sedate and well-ordered brethren. Without a tail thou wilt be nothing, that being an appendage which all whose flight is very elliptical now require, in order to avoid uncomfortable jostling. Harken, then, O Anthony, more to the voice of public opinion, which is opposed to thine, and which is omnipotent as regards *thee*, and digest well the translation we have put into thy mouth of the verse of Pliny, who was neither obstetrician nor chirurgeon, but a philosopher of the first mark. Farther to assist thee in thy wanderings, we subjoin the following passage, extracted from the evidence of Sir Charles Clark, M.D., F.R.S., given before the same tribunal at which even thou didst figure.

"Throw the word 'midwifery' out of the question. It appears to be the stumbling block; take away the word, and the management of the function of the uterus is as much a part of surgery, as the management of the function of the bladder or of any other organ.

in the body. An examination, if it ought to be made at all, and it ought to be made as to other functions, ought to be made of course into this function, it making a part of that whole to which whole is given the name of surgery. It is the word 'midwifery' which makes the whole difficulty. It is a branch of physic, it is a branch of surgery. Put it only as a branch, and the whole difficulty is avoided; but if you say that midwifery is something, it is simply this,—midwifery is the superintendence of a function of the human body; it is either medicine, or it is surgery, or it is both: it cannot be nothing. If it be medicine, the qualification of the candidate should be tested by the physicians; if it be surgery, it should be tested by the surgeons; and as there is a class of medical men, termed general practitioners, who are understood to be competent to the practice of surgery, then the same qualification is to be expected from them."

Masticate that, Sir Anthony; and now, until we meet again, which we shall probably in our next number, most cordially farewell. Your humour, such as it is, and jocularity, at the same time that they have tired every muscle and ligament in our maxillaries, have refreshed our intellectual gravity, and called forth, on our otherwise sombre countenance, a grin so broad and perpetual, that were you to see it, it would (we bet a man-mid to a chirurgion) produce another grin, as broad and sunny on your own handsome and joyous face. For the relief you have given us in this, therefore "much thanks," and, until you guess *when*, FAREWELL.

(To be continued.)

ROYAL COLLEGE OF PHYSICIANS.

June 29th, 1835.

On the Browach.

On entering the library of the College this evening, we were rather surprised at the display of fresh plants on the table. There were certainly some that were highly deserving of attention. The assembly of *medici* (using the term in its wide extended and legitimate sense, including all the legally qualified practitioners of the healing art.) was large, and, as a matter of course, very respectable.

The communication which had been prepared for the evening's entertainment, proceeded from the pen of the Registrar, Dr. Hawkins, and was entitled, "On the Browach," including apparently under that title all painful affections of the supra-orbital nerve. The author commenced with the detail of four cases, which were classed together, although decidedly dissimilar. The first case, by no means a rare example of disease, occurred in the person of a young lady, who it appears had experienced some disappointment, and was afterwards affected with regular inter-

mittent neuralgia of that nerve. Although apparently there was not any of the organs in fault, neither mineral nor vegetable tonics could remove the complaint, until a few alterative doses of blue pill had been prescribed, and then a cure was speedily effected. The lactucarium was administered in conjunction with the tonic.

The next case was that of a lady suffering from remittent browach, arising from cold, which was not removed until after the application of some leeches, when mild opiates and aperients completely cured the complaint.

The third was evidently dependent on derangement of the catamenial functions, and disappeared on the uterus performing its duties rightly. (By-the-bye, is it not against the ethics of the College for a Fellow and officer of that exclusive institution to meddle with a case so evidently bearing upon obstetrics?)

The last case, that of a man recently a patient in the Middlesex Hospital, was one of intermittent neuralgia of the frontal nerve, cured by the sulphate of quinine and the extract of conium.

The Registrar, in the course of the observations which he made on these cases, took occasion to pay Sir H. Halford a compliment (somewhat of the most fulsome) on his Essay on *Tic Douloureux*, and endeavours to carry still further the ideas promulgated in that paper. He is of opinion that the vicinity of these nerves to the frontal bone may be a cause for the frequency with which they are diseased. A more crude idea never issued from the brain of man: how can any human being capable of reasoning assume for an instant that because a nerve is placed by nature near a bone, it must become diseased, or at least in a greater ratio than other nerves? Were such the case, we should frequently have the nerves entering and supplying the osseous structure of the system in a state of inflammation or disease; but it is well-known that such is not the fact, and consequently the only new deduction made by Dr. Hawkins falls to the ground.

The meetings at the College of Physicians have now closed for the present year, without, however, any more being done than the exhibition of a few plants, specimens of the materia medica, books, engravings, &c., &c. As these might be as well seen, and perhaps to greater advantage, at a druggist's, bookseller's, or herbalist's, we shall not make any further allusion to them. In the course of the past session, several papers have been read, but little additional medical information elicited, certainly not to the amount we are entitled to expect from so learned an institution.

APOTHECARIES PRACTISING MEDICINE.

To the Editors of the London Medical and Surgical Journal.

GENTLEMEN,—I was rather surprised, but at the same time also amused, by a production in your last number, purporting to be a letter from one of the honourable fraternity of physicians. Surely, gentlemen, the writer of that letter cannot be in his senses, or he would never have penned such egregious nonsense. The first assertion which he makes assumes that I was unacquainted with the fact that the act of William II., to which I alluded, was made perpetual in the reign of George I. This is a decided mistake; I was to the full as well aware of that circumstance as *Medicus*, but did not deem it necessary to allude to it in my first letter, inasmuch as I merely wished to point out the fact that the attendance of apothecaries on the sick was recognised in direct and distinct terms by the law of the land, and this your correspondent cannot disprove, although he has recourse to an absurd piece of etymology to prove his point. In the sense in which he would use the word "nurse-tenders" (a word, by-the-bye, for which I am indebted to him, for I never heard it before, but still I do not doubt its authenticity), it can mean nothing else than that those menials waited upon the sick, doing the necessary offices of a servant for them; and surely *Medicus*, however much he may be attached to his order, will never presume to intimate that apothecaries were so employed. No, gentlemen, it is a self-evident fact that the act contemplated medical attendance, as the mere receiving the orders of the physician and transmitting them to the nurse, could be as readily executed by a footman as an apothecary, and consequently there would be no reason why the latter should be exempt from the performance of civil duties.

I have the honour to be,
Gentlemen,
Yours obediently,
THERAPEUTES.

NAPOLEON AND DR. AN TOMMARCHI.

THIS physician speaks of fundamental faculties of which neither Gall nor Spurzheim ever thought; the researches we have made convince us that he was not the first who formed the idea of taking a cast of the Emperor's head, and in making it, he had no thought of phrenology; let us add, that the excuses he has offered for not having modelled the whole of Napoleon's head, are specious, and only prove one thing, that he did not know the scientific importance of his valuable trophy until he reached Paris.—*Journal de la Société Phrenologique de Paris.*

THE

London Medical and Surgical Journal.

Saturday, July 25, 1835.

NEGLECT OF MIDWIFERY BY THE COLLEGE OF SURGEONS, &c.

Of all the strange and lamentable omissions which exist in the examination of practitioners of medicine, perhaps none is more glaring and worthy of reprobation, than the neglect at our public institutions to inquire into the candidates' competency respecting midwifery. It is true that certificates of having attended lectures on this science are required at the College of Surgeons and the Hall of Apothecaries, prior to being admitted to their examination, but no questions on obstetrics are put, and, therefore, the qualification of the student in it remains unascertained. By demanding certificates of having attended lectures and cases in midwifery, the College and Hall acknowledge it to be a necessary portion of a medical man's education; and if so, why not examine into his capability on that head? We know that a great deal is said at the College of Surgeons about their not having a right to investigate the candidate's attainments in this respect, but trust a more efficient plan of examination, in which midwifery will be included, will before long be adopted. In the mean time, we take the liberty of inserting a few observations on that art, of such vital consequence to the female portion of the community, in order that those who may be inclined to think too lightly of its importance may have an opportunity of judging and thinking a little more deeply. We especially recommend the following observations to the attention and study of Sir Anthony Carlisle, and others who may be of his opinion in this matter.

The art of midwifery does not merely

comprehend the superintendence of a function in which nothing is required, and, consequently, concerning which nothing is to be done, but it involves the management of a great number of cases of great difficulty, of great danger; of cases which, if treated rightly, life is preserved, if treated improperly, life is destroyed. It may be right to state that the process of human parturition is very different from the process of parturition in other animals. In order to obviate the effects of gravitation, the cavity through which the contents of the womb have to pass is not placed in the same line with the trunk of the body in the human subject, as it is in other animals; and the price which is paid for the advantage of the erect posture of the body, is the increase of the difficulty and of the danger attendant upon parturition. Cases of the most simple kind, which are included under the head of natural labour, are by watchfulness, care, and doing but little, attended with little hazard; but these cases, without watchfulness, without care, or with obtrusiveness, may be converted into cases of the greatest hazard.

We need hardly state, that the act of labour is made up of a resistance to be overcome, and a power capable of overcoming it, and that the latter should beat the former; but this does not uniformly occur; the resistance is then greater than the power, and, consequently, it becomes necessary, either to increase the power artificially, or, in cases of disproportion between the cavity and the body which has to pass through it, either to lessen the volume of the body which has to pass through, or to sacrifice the life of the woman to preserve the life of that body, the child. It is a settled axiom that the head of a child, which in its short diameter, taking case with case, measures

four inches, cannot pass through a cavity which measures less than three, without a diminution of its size. A diminution of its size can only be effected by lessening the quantity of its contents, namely, the brain; but with the extraction of the brain comes the loss of life.

It appears, then, that those cases of difficulty and of danger which depend upon the disproportion between the body which has to pass through and the cavity through which that body has to pass, are cases which require great attention, much anatomical knowledge, accurate powers of comparison between the major and the minor, great judgment as to the determination of whether either life should be sacrificed, and *which* life should be sacrificed; and the difference of half an hour or less often determines the fact, whether the practitioner should destroy the child's life to preserve the life of its mother by opening its head, or whether he shall adopt such other means, the employment of *time especially*, as may possibly justify him in waiting without operating.

There are other cases. In the greater number of instances, the presentation of the child is by its head; but, in some instances, it happens that other parts than the head will present themselves, and in such positions that delivery under the circumstances becomes impossible. If a case be ignorantly treated or mistaken, there is no question but that of life or death. If the case be known and treated, but not treated skilfully, an accident of the most fatal nature, namely, a rupture of the uterus, is effected by the improper performance of such operation, and the life of the woman is lost. There are cases not unfrequently of hæmorrhage occurring in labour. Some of those cases of hæmorrhage depend upon the opposition of the placenta to the os and cervix uteri. In

those cases the first part of the process, which involves the dilatation of that opening, involves the patient in a state of positive and imminent danger; for the placenta consists of a congeries of blood-vessels, which being torn through, the life of the child is sacrificed by the loss of blood, and the mother would either die undelivered, or she would die of hæmorrhage after the delivery. So that in such a case it becomes absolutely necessary to make a perforation by the hand through such placenta, and to deliver the child through the opening so made, in order to avoid the fatal consequences.

In labours the most natural, in women of weak powers, it often happens that hæmorrhage takes place, and that it becomes the cause of death.

It is very well known to physicians and surgeons, and to physiologists and philosophers in general, that the restriction of hæmorrhage is attributed to two causes, namely, to the coagulation of the blood, which forms a plug in the bleeding-vessel, and to the contraction of the blood-vessels which obliterates their cavity. It is obvious that the blood cannot coagulate unless it be at rest, it is equally obvious that it cannot be at rest in a large vessel, where the pressure behind would prevent it. But to the uterus of women is given a power, unique in its kind, not given to the uterus of any other animal—muscular contraction, by the exertion of which power the sides of the vessel are compressed against each other, so that what could not be effected by a mere contraction of the vessel itself, happens through the agency of the surrounding muscular fibres. This is the provision of nature given to the human uterus alone, the structure of the placenta in other animals being twofold, one part coming away, the other remaining behind.

It is quite obvious, therefore, that the knowledge of the mode of restraining hæmorrhage, by producing the contraction of the blood-vessels, by forwarding the coagulation of the blood, and especially by producing contraction of the uterus itself, is of infinite importance to everybody who has the care of the act of parturition; and a vast number of women are lost every year by the ignorance of persons upon this subject.

There is another case—"convulsion," "puerperal convulsion," so called because it is unlike any other convulsion in some of its circumstances. Such cases in ignorant practice almost always end fatally, but in good practice as continually end well. And the same may be said with regard to cases of hæmorrhage. A bad practitioner will lose nineteen out of twenty of his cases of hæmorrhage, a good practitioner will hardly ever lose a case.

The treatment of abortion also requires considerable surgical as well as medical ability.

Now such as digest what has been said above, will feel no difficulty in being convinced that an examination into the candidate's obstetric qualifications should be instituted. Much of the general practitioner's practice consists in midwifery, and there can be no sufficient reason adduced why he should not undergo an efficient searching in this as well as in any other branch of his studies. We repeat, we fully expect that a reform in this respect will soon take place.

COLOSSEUM FETE IN AID OF THE
WESTMINSTER, CHARING-CROSS,
AND NORTH LONDON HOSPITALS.

A FEW days ago a *fête* was given at the Colosseum for the benefit of the Westminster, Charing-Cross, and North Lon-

don Hospitals. A sum amounting to 1663*l.* 10*s.* was received for tickets. The expenses amounted to 1099*l.*, leaving the comparatively small balance of 564*l.* 10*s.* to be divided among the hungry institutions abovenamed. More than half the sum set down for expenses went into the pockets of Braham and Yates, according to agreement, while Gunter, the man of puff and paste, and the printers licked up the remainder. So here we have a *fête*, given expressly for a charitable purpose, out of the proceeds of which about two-thirds find their way into the pouches of those who want no charity. Is it not a pity that the benevolent cannot find a more direct, straightforward way of bestowing their bounty than the mode in question? Doubtless many, who would not otherwise have gone to this *fête*, bought tickets with the idea and intention of doing a charitable act. Let them look at the accounts, and behold how Punch and Judy and the lad of cakes have lined their nests with the feathers plucked out of the wing of their charity. Of a verity some other medium, through which to diffuse the milk of human kindness, should be sought than those *fêtes* and fancy fairs, which absorb for the most part more than two-thirds of the alms intended for beneficent purposes. It is really monstrous to witness this perversion of the tide of public feeling; not one in twenty who has contributed his guinea for a ticket ever takes the trouble to inquire how it has been applied, but rests satisfied that it has gone almost in its entirety to the fund in aid of which it was subscribed, and the poverty of which has been proclaimed probably in fifty advertisements. Let such as have suffered themselves to be deceived in this way, cast a glance over the account showing the distribution of the sum collected at

the Colosseum *fête*, and they will, in all likelihood, on the next occasion of using their liberality, extend it in a more direct manner to the establishment in need. We do not quarrel with singers and pastry-cooks for the portion of spoil they appropriate, but we *do* quarrel with a management under which the greater portion of what should be considered a charitable contribution, finds its way into their cash-boxes.

ALTERATION OF ONE OF THE LATE REGULATIONS OF THE SOCIETY OF APOTHECARIES.

THE Court of Examiners of the Worshipful Society of Apothecaries have, in consideration of a petition signed and forwarded to them by twenty-seven medical students at Exeter, condescended to utter a few "more last words." These words go to modify that passage in their last curriculum which says "students whose attendance on lectures shall commence on or after the 1st of October, 1835, will also be required to produce proof of having attended during three winter, and two summer sessions lectures in the following order, and medical practice from the commencement of the second to the termination of the third winter session," &c. It appears that the petition was likewise approved of by thirty-eight medical practitioners resident in Exeter, who attached their names, and, we doubt not, by their weight and respectability, were mainly instrumental in obtaining a favourable answer from the Court of Examiners. The following is an extract from the answer of the latter—

"The Court of Examiners were, however, fully aware that many instances of inconvenience, and even of hardship, might arise from the immediate and universal application of the extended course

of study; and, in the preface to their regulations, they have expressed their solicitude to lessen these inconveniences wherever they arise. Among the individuals whose interests are most affected by this important change, none are more deserving of consideration than those who are compelled to pass the whole period of their apprenticeship in practical pharmacy; such a servitude was never contemplated by the act of 1815; and the Court of Examiners have not neglected on many occasions to call the attention of the profession to this particular point. To save the time, and to obviate the expense which would be incurred by gentlemen so situated, the Court have passed the following resolution, which they conceive will be satisfactory to those who, from the terms of their indentures, are unable to comply with the regulations just published.

“Resolved—*That those gentlemen whose indentures of apprenticeship bear date prior to the 1st of October, 1815, and who can adduce proofs to the satisfaction of the Court, that they have not been permitted to commence attendance upon the medical classes during their apprenticeship, will be allowed to complete their studies in conformity with the regulations of January, 1831.*”

A tolerably abundant number of certificates of the sort required, will, we have no doubt, be adduced at the proper time—and “*proofs to the satisfaction of the Court,*” will come, thick as autumnal hail, before it. We had intended to offer a few comments on the subject, but want of room compels us to be brief. We therefore conclude with wishing our young medical friends throughout the country joy of the concession they have so manfully obtained from the Court at Blackfriars.

PROPOSED CHANGES IN THE BY-LAWS OF THE WESTMINSTER HOSPITAL.

(*Second Notice.*)

IN our last number we endeavoured to point out some of the improprieties and absurdities contained in the laws and regulations of this hospital, as amended by a Committee, and we further essayed to show some of the real causes and objects which induced the framing of the said laws. We shall now proceed to examine some others which have relation to the medical arrangements of the Institution, and which, although not probably of the same degree of interest and importance as the preceding, yet merit some notice at our hands.

Among the regulations relating to the duties of the physicians and surgeons, there is one stating that the medical officers are required to adhere *punctually* to their appointed hours and day, and failing their attendance shall procure some one of their colleagues to officiate for them. This, again, receives our qualified approbation; as a general rule it is good, and should be enforced when practicable. The attendance of the medical officers of our public charities is unfortunately too irregular not to require some such a law to induce greater regularity; there are but few of our institutions where such a decree would not be of advantage; but still it is one that must not be acted on too strictly, inasmuch as private practice, to gain or increase which these officers are, in many instances, sought for and accepted, will not unfrequently interfere. This excuse is available in many instances, and as it is to be presumed that none but gentlemen are elected to fill these offices, it is to be supposed that in all cases when alleged it is *bonâ fide* the true one. Still, however, we cannot on these grounds excuse the non-attendance and late hours of many of our London hospital physicians and surgeons; they are frequently so regular in their irregularity as to defy all possibility of accounting for their conduct. We may therefore say that this regulation would be of assistance were it put in force in more than one of our hospitals.

The duties of the apothecary are manifold and most important; they are such as warrant the governors in exercising their utmost judgment in the election of so valuable an officer. *Ecce.*—“The apothecary is to visit the wards *at least* twice a-day, and inquire whether each patient has been supplied with, and *has taken*, the medicines prescribed.”

He is to see that tickets, specifying name, age, date of admission, and disease of each patient, with the name of the physician or surgeon, and also the diet prescribed, are affixed to each bed-head. He is also to prepare a daily and a weekly diet roll. Furthermore, he is, after consultation with the clinical assistant and house-surgeon, to indicate by a ticket, expressly constructed for that purpose,

those patients whom he may consider sufficiently recovered to be discharged. In addition, he is to dispense the medicines in accordance with the prescriptions he may receive from the physicians and surgeons; and it is *his duty* to see that proper labels are affixed to the several drawers, bottles, and utensils; moreover, he must keep a register of all in-patients. As a clincher, not a *placebo*, it is ordered that he shall never be absent without leaving word in writing where he is gone, nor unless one of the medical officers (query the physicians or surgeons) and the matron (to see the patients take their physic, we presume), undertake to remain in the hospital during his absence. "He shall on all such occasions return at a reasonable hour, and he shall not sleep out of the hospital without leave in writing from the Treasurer or the House Committee."

When all these things are duly and truly accomplished, this indefatigable officer of the institution will be permitted to go to supper with what appetite he can.

The duties assigned to a legally qualified member of the medical profession are those of the veriest menial. Is it to be endured, even for an instant, that a person who is entitled by birth, education, and manners, and whose profession pre-eminently entitles him to high rank in the estimation of the *grande monde*, should be commanded to go round the wards twice a day, to do what?—Not to ascertain whether any new symptom has arisen in any of the patients, requiring instant care to save life;—not to dispense that medical assistance which his diploma states him capable of affording; but in reality (blush, men of Westminster, blush!) to perform the duties of a nurse, and ascertain whether the sick have swallowed the last nauseous dose of jalap or aloes. To make assurance doubly sure, this degrading duty is also to be performed by the house surgeon and clinical assistant, each in his respective wards. The next regulations will state that these gentlemen are to administer the enemata, and see that the beds are properly made. The whole tissue of duties assigned for this gentleman are so absurd, that no man in his senses can assent to them.

Under the head secretary, we have the following exquisite piece of folly. "The secretary alone shall have authority to admit any in-patient between the meetings of the house-committee:" that is, from Tuesday to Tuesday; so that if a poor unfortunate wretch should come in with a severe injury, and the secretary's spectacles should not be clear enough to enable him to discover the danger, or should that worthy officer of the institution not be in the hospital at the time, the miserable being would stand a very good chance of not being admitted, unless he brought a letter from his Grace the Duke of * * * *, or the Most Noble the Marquis of * * * *, when he would be admitted in preference to any other applicant.

The qualification for house surgeon is

satirically said to be a certificate that he has been at least three years engaged in the study of medicine and surgery; but the only and real qualification is the fee of one hundred guineas, which, being paid, any fool may get the office. The duties to be performed are, to see that the patients take their physic, to ask permission of the secretary to admit a man who has broken his femur, and to see *that the nurses promptly afford such assistance as may be necessary*; he is also to take care of the bandages, plaisters, and instruments, and to take care they are not embezzled; a very natural precaution, and certes the duties are so very agreeable, and so much instruction may be gained therefrom, that we are not surprised at the readiness with which the fee is paid.

Under the head "Domestic Government," we have the following, in which the secretary, matron, and nurses are included in the spy system.

"Pupils shall be only permitted to visit the wards in the presence of one of the medical officers of the establishment during their regular visits, or by the special order (not permission) of one of the physicians or surgeons; and no medical person, not an officer of the establishment, shall be permitted to examine a patient professionally. The secretary, matron, and the nurses are respectively required to give notice of any breach of this rule."

Here we have one of the most absurd by-laws ever penned; pupils are expected to acquire medical knowledge in these institutions, and yet the only means by which they can acquire it is to be closed to them, although a medical student of perhaps less knowledge and less talent can visit when he pleases, his purse containing just one hundred guineas more than those of the others. The spy-system is to be carried so far, that the secretary, worthy man, is to enter the names of the guests of the resident officers in a book to be kept for that purpose.

The porter, among his other interesting duties, is not to permit any *pupil!* patient!! or other person!!! (by way of a climax) to loiter about the door, passages, &c. The honour done the students by the choice of their Mentor is such that it should be instantly acknowledged.

We have now gone through the greater part of these new by-laws, which appear to us to be constructed with no other view than that of trampling on the medical officers and the students, with the specious object of furthering the good of the Institution. A regular system of spies is to be established; the duties assigned to the resident medical officers are of the most degrading kind; while the laws concerning *gli principi*, the chiefs, the heads of the medical staff, are of that nature that we cannot trust ourselves to characterise them as they deserve. Let the well-wishers of the Institution look to it; these laws will do it material injury, and perhaps ruin it as a medical school.

MISCELLANEOUS.

MM. Legroux and Lepelletier (du Mons), have been appointed physicians to the Bureau Central of Paris, after a well-contested concours.

Montpellier.—There are three vacant professorships at the Faculty of Medicine at Montpellier,—the chairs of medicine, surgery, and the preliminary and accessory sciences. The concours will commence on the 16th Nov. 1835. Candidates are required to send on or before the 31st August, to the secretary of the Faculty, their legal certificate of birth, and the diploma of doctor in medicine or surgery.

Cholera.—Eighty-seven fatal cases of this epidemic occurred at Ade in the short space of sixteen days in the course of last month.

Attempt at Suicide.—A young lady, who had long been labouring under severe and painful illness, ascertained from her medical attendant that he was giving her anodynes to relieve her sufferings; in lieu of taking these medicines, she contrived to secrete them for a few weeks, until rather a large parcel had collected, and then, thinking she had obtained enough to destroy life, she swallowed the whole. It is almost needless to state that the extreme dilution of the opiate prevented any very injurious effects on the system.

War in Spain.—British surgeons going to Spain with the forces of Donna Isabella need not dread the ferocity of the Spanish pretender or of his satellites. This would-be monarch intended to put all the auxiliary forces to death when he could catch them, but he has been deterred from the execution of that menace by a quiet notice from our paternal government, that if he acts otherwise than in accordance with the laws of civilised nations, it will hold him responsible, and treat him accordingly.

Royal College of Surgeons.—John Goldwyer Andrews, Esq., of the London Hospital, has been appointed president, Sir Astley Cooper and Sir A. Carlisle, vice-presidents for the ensuing year.

In a convocation at Oxford, holden last week, it was unanimously resolved to confer the degrees of doctor in medicine by diploma upon two of the most distinguished medical and philosophical writers of the present day, namely—John Abercrombie, Esq., Fellow of the College of Physicians in Edinburgh, and First Physician to the King in Scotland, and James Cowles Prichard, Esq., of Bristol, F.R.S., some time of Trinity College.

On Dit—That so numerous have been the applications for surgeoncies to the Anglo-Spanish expedition, that two battalions might be formed of the applicants.

Latin Examination at the Hall.—We understand that the Society of Apothecaries do not make any charge for the separate Latin examination.

APPOINTMENTS.

Military.—Hospital Staff—To be Assistant-Surgeons to the Forces—John Thomas Telfer, gent., and Richard Dane, M.D.

General.—Dr. King, Dr. Todd, and Dr. Castle, to be physicians to St. Mary's Hall, Brighton. Mr. Daniel Ball, of Burslem, surgeon to the North Staffordshire Dispensary.

Resignations.—Dr. Philips James, physician to the Derbyshire Infirmary and General Dispensary. Dr. J. P. Kay, physician to the Ardwick and Ancoats Dispensary, near Manchester.

DEATHS.

Mr. George Hobson, of Great Marlborough-street, London, surgeon. Mr. William Edwards, surgeon, formerly of Fairford and Chester. Mr. Alexander Adderley, of Kilkcel, Co. Down, surgeon. In Liverpool, Dr. William Anderson, late of Bolton. Mr. Mark Willett, of Chepstow, surgeon. Mr. Edmond Goodwin, of Newport Pagnell, surgeon. Mr. Albinus James Dixon, of Hovingham, near Malton, Yorkshire, surgeon. Mr. E. D. Spence, of Crosshill, near Wigton, Cumberland, surgeon.

WEEKLY BILL OF MORTALITY.

London, Tuesday, July 21, 1835.

Age and Debility	20	Inflammation of the	
Apoplexy	2	Bowels & Stomach	3
Asthma	5	Inflammation of the	
Cancer	1	Brain	2
Childbirth	4	Inflammation of the	
Consumption	47	Lungs and Pleura	3
Convulsions	22	Insanity	2
Dentition, or Teeth-		Liver, Diseased . . .	3
ing	3	Measles	10
Diarrhoea	1	Mortification	4
Dropsy	5	Paralysis	1
Dropsy on the Brain	9	Small Pox	14
Dropsy on the Chest	1	Sore Throat & Quinsey	1
Fever	7	Trush	2
Fever, Scarlet	4	Unknown Causes . .	3
Hæmorrhage	2		
Hooping-Cough	3		
Inflammation	14	Stillborn	14

Buried, Males 113 Females 103 Total 216

Decrease in Burials reported this week, 64.

BOOKS RECEIVED.

A Map of the Eye. By J. H. CURTIS, Esq., M.R.C.S., &c., &c.

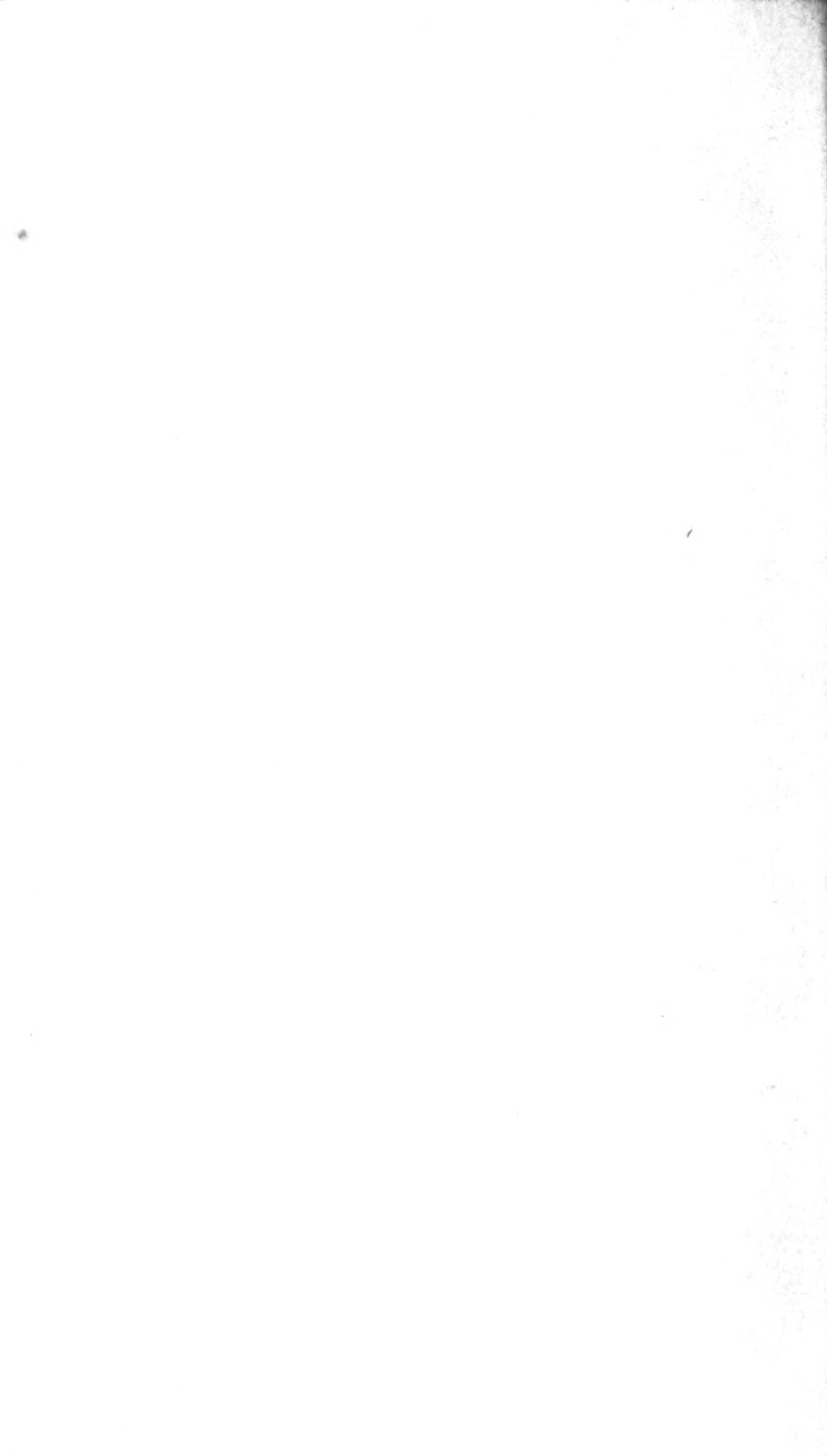
Medical Practitioners at the present day are paying a great deal more attention to the diseases of the eye than was formerly the case: to them this map will be an acquisition.

LITERARY INTELLIGENCE.

In the press and shortly will be published, An Interlinear Translation of the Second Book of Celsus, with the words attached, and all the doubtful quantities correctly marked, according to the latest authorities. By G. TURNER.

CORRESPONDENTS.

The index will be given in an ensuing number.





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